

## APSSAM 6th Biennial Meeting of the Asia-Pacific Society for the Study of Aging Male

Paradise Hotel Busan, Korea | September 1-4, 2011

#### Call for Abstracts & Registration!!

Warmest greeting from APSSAM2011. We would like to inform registration, abstract submission and hotel reservation for the upcoming APSSAM2011.



#### Registration

Registration for the APSSAM2011 is carried out on-line, through the official website www.apssam2011.org. Please register now to secure your attendance at this important and exciting Congress. Those who act fast will be eligible for the early registration offer which is available to all registrations received prior to 30 June 2011. Don't miss out on the opportunity to experience the scientific program and enjoyable social program.

#### Go to E-Registration



#### Abstract Submission

Abstract submissions for APSSAM2011 open to all individuals interested in the field of Aging Male. The Scientific committee of Local Organizing Committee of APSSAM2011 welcomes the submission of abstracts for oral or poster presentation. Please visit the website for the submission guidelines. On-line abstract submissions will close on June 15, 2011.

#### Go to E-Abstract Submission



#### Hotel Reservation

The Local Organizing Committee of APSSAM2011 is pleased to offer a wide selection of hotels with discounted rates near the venue. Please note that the special discounted rate can be provided only when you make a reservation through the official website. As rooms will be reserved on a first-come, first served basis, once room blocks at these hotels have been filled, we may unable to secure further rooms with the hotels at the special rates quoted. Therefore, early hotel reservation is highly recommended.

#### Go to E-Hotel Reservation

#### Important Dates

#### Contact Information

Abstract Submission Deadline	June 15, 2011	General Contact	secretariat@apssam2011.org
Early Registration Deadline	June 30, 2011	Abstract Submission	abstract@apssam2011.org
Late Registration Deadline	July 31, 2011	Registration	reg@apssam2011.org
Hotel Reservation Deadline	July 31, 2011	Hotel Reservation	hotel@apssam2011.org
		Sponsorship/Exhibition	sponsor@apssam2011.org

#### WWW.APSSAM2011.ORG

#### APSSAM2011 Secretariat

20th floor Koosan Tower 3250 Bangbae 2-dong, Seocho-gu, Seoul 137-967, Korea

Phone: +82-2-6288-6316 / Fax: +82-2-6288-6398~6399

E-mail: secretariat@apssam2011.org

# 6th JAPAN-ASEAN Conference on Men's Health and Aging

11th Annual Meeting of the Japanese Society of Men's Health 3rd Meeting of the Society for Anti-Aging Medicine in Urology

Spreading Men's Health in Asia

Program and Abstract Book

Date: June 30 (Thu.) – July 3 (Sun.)

Venue: Kenchoji and Kamakura Prince Hotel, Japan

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#### **Welcome Message**

#### from the Congress Chairperson

As the local host and Chairperson for the 6th JAPAN-ASEAN Conference on Men's Health & Aging, I truly appreciate your presence at this meeting.

First and foremost, we would like to express our sincere condolences to all those who have lost family and friends in the Great East Japan Earthquakes



and Tsunamis on March 11, 2011. We also send our prayers to everyone in the Tohoku area who continue to face severe difficulties in the wake of the disaster. We herein swear to do our best to aid in their complete recovery from the disaster.

We are emboldened by the kind words of our overseas guests. Their willingness to come to Japan to deliver lectures as planned gives us great encouragement to hold this conference. Furthermore, more than 25 posters were submitted in response to our sincere plea for your help to promote Men's Health in Japan. We now feel that we are not isolated, but rather, we are delighted to be connected to you around the Globe.

Throughout this meeting, we would like you to enjoy the scientific programs as well as the social events. I hope you will join in the local charity project to deliver books to children in the affected area.

Thank you for your attendance at the 6th JAPAN-ASEAN Conference on Men's Health & Aging.

Shigeo Horie, M.D

**Congress Chairperperson** 

6th JAPAN-ASEAN Conference on Men's Health and Aging

#### Welcome Message

#### Dear Colleagues,

As President of JAPAN-ASEAN Council on Men's Health and Aging it is a great pleasure to welcome so many distinguished international guests and Japanese colleagues to the 6th JAPAN-ASEAN Conference on Men's Health & Aging held in Kamakura. I also would like to express our gratitude to our international guests who have kindly traveled such long distances to be here with us in spite of their busy schedules.



Medical progress and economic growth led to expanded life expectancy during this half century. The aged population will increase in developed and developing countries alike. There is, therefore, an urgent need to conduct research into aging and reduce the burden of coping with socio-economic problems. This Conference will aim to discuss the promotion of healthy aging and prevention of the morbidity and the disability of the aged male, especially in the Asian region.

I hope you will enjoy the exciting program at the Conference and exchange knowledge and experiences in the field of Men's Health and Aging.

Kamakura is a historic place with a lot of scenic beauty. It is our sincere hope that you will fully enjoy your stay in this beautiful area.

Professor Mikio Namiki

On behalf of JAPAN-ASEAN Council on Men's Health and Aging

#### **Organizing Committee**

#### **Honorary & Founding Presidents**

Akihiko Okuyama (Japan)

Hui Meng Tan (Malaysia)

#### **Conference Chairman**

Shigeo Horie (Japan)

#### **Scientific Committee**

Akira Tsujimura (Japan) Atsushi Nagai (Japan) Eitetsu Koh (Japan) Haruaki Sasaki (Japan) Hiroshi Okada (Japan) Ken Marumo (Japan) Kenji Toba (Japan) Koichi Nagao (Japan) Masahiro Akishita (Japan) Masato Fujisawa (Japan) Osamu Yokoyama (Japan) Raizo Yamaguchi (Japan) Satoru Muto (Japan) Taiji Tsukamoto (Japan) Tatsuya Nakatani (Japan) Tomohiko Ichikawa (Japan) Toshiki Moriyama (Japan) Yoshiyuki Kakehi (Japan)

#### **Secretary**

Hisamitsu Ide (Japan)

#### **Advisory Committee**

Eiji Higashihara (Japan) Hideyuki Akaza (Japan) Mikio Namiki (Japan) Masaru Murai (Japan)

#### **International Advisors**

Yasuyoshi Ouchi (Japan)

Zulkifli Md Zainuddin (Malaysia)

Ajay Nehra (USA)

Doddy Soebadi (Indonesia)

Kavirach Tantiwongse (Thailand)

Kok Kit Ng (Singapore)

Michael Zitzmann (Germany)

Siegfried Meryn (Austria)

Apichat Kongkanand (Thailand)

Kavirach Tantiwongse (Thailand)

Kwangsung Park (Korea)

P. Ganesan Adaikan (Singapore)

Yoshiaki Kumamoto (Japan)

#### JAPAN-ASEAN Council on Men's Health and Aging

#### Founding Presidents & Advisors

Akihiko Okuyama

Hui Meng Tan

#### **Honorary President**

Yoshiaki Kumamoto

#### **President**

Mikio Namiki

#### **Vice President**

Zulkifli Md Zainuddin

#### **Secretary General**

Shigeo Horie

#### **Deputy Secretary General**

Boon Cheok Lee

#### **Council Members**

Akira Tsujimura Atsushi Nagai Apichat Kongkanand

Chirk Jenn Ng Doddy Soebadi Haruaki Sasaki Hiroshi Okada Jose Albert C Reyes Ken Marumo

Koichi Nagao Kavirach Tantiwongse Kok Bin Lim Kok Kit Ng Masahiro Akishita Masato Fujisawa

Kok Kit NgMasahiro AkishitaMasato FujisawaNhu Thanh NguyenOsamu YokoyamaPeter HC Lim

Simon Chong Stanley E. Althof Tatsuya Nakatani

Tomohiko Ichikawa

#### **Supporters**

Ministry of Foreign Affairs of Japan

Kamakura City

Kamakura City Medical Association

The Japanese Urological Association

The Japan Geriatrics Society

Japanese Society of Anti-Aging Medicine

Japanese Society of Nephrology

The Japanese Society for Sexual Medicine

The Japan Society for Menopause and Women's Health

Kamakura Shunjusha Co., Ltd.

**General Information** 

**Passport and Visa** 

To visit Japan, you must have a valid passport. A visa is required for citizens of countries that do not

have visa exempt agreements with Japan. Please contact the nearest Japanese Embassy or Consulate for

visa requirements.

Insurance

The Organizing Committee can accept no responsibility for accidents or damage to the private property

of participants. Please make your own arrangements for health insurance and any other necessary

insurance.

Climate

The temperature in Kamakura during the period of the Congress ranges between 21 - 27 degrees

Celsius.

**Local Time** 

Japan Standard time is 9 hours ahead of G.M.T. The time difference for major Asian cities is shown

below (decrease by 1 hour during Daylight Saving Time period):

Beijing: -1 hour

New Delhi: -3.5 hours

Seoul: 0 (same)

Singapore: -1 hour

**Public Transportation** 

For general transport, taxis are plentiful but expensive. JR Railway provides easy access to and from

Tokyo Station.

**Currency** 

Currency in Japan is the Yen (yen/JPY). Notes are available in denominations of 10,000, 5,000, 2,000

and 1,000 yen. Coins are minted in denominations of 500, 100, 50, 10, and 1 yen. Exchange at the

airport is recommended for your convenience. Most foreign currencies and travelers' checks can be

exchanged at authorized foreign exchange banks. However we highly recommend purchasing travelers'

checks or cash in Yen, U.S. dollars or Euros before leaving your home countries. A passport may be

required for currency exchange services.

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#### **Credit Card**

American Express, Diners Club, Visa and MasterCard are widely accepted at hotels, department stores, shops and restaurants.

#### **Electricity**

Electric current is uniformly 100 volts, AC, throughout Japan, but with two different cycles: 50 in eastern Japan including Kamakura and Tokyo, and 60 in western Japan including Kyoto, Osaka and Nara. Leading hotels in major cities have two outlets of 100 and 230 volts but their sockets usually accept a two-leg plug only.

#### **Tipping**

In Japan, tips are not necessary anywhere even at hotels and restaurants.

#### **Shopping**

Shops and other sales outlets in Japan are generally open on Saturdays, Sundays and national holidays as well as weekdays from 10:00 to 20:00. Department stores, however, are closed on one weekday, differing by store, and certain specialty shops may not open on Sundays and national holidays.

#### **Mobile Telephone**

Mobile telephone rental is recommended, as most foreign cellular phones are not compatible with Japan's network. Mobile phone rental shops are conveniently located at Narita and other international airports. Please check with your mobile network provider prior to your departure.

You can use only NTT DOCOMO phone at Kenchoji. Other mobile phone, eg. au, iPhone etc, are unable to be use there.

#### **Clothing (Important Information)**

The conference will be held at the Kenchoji (Zen Temple), so we may ask you to take off your shoes at the entrance of the temple.

The temple is very old and air conditioners might not work very well. Please come in casual clothes, not in suits. We recommend wearing very light clothes, e.g. polo shirts, aloha shirts or jinbe (Japanese shirts). If you wear sandals, it will be convenient to take them off at the temple.

#### **Conference Information**

#### **Conference Organizer**

The Japanese Society of Men's Health

Department of Urology, Teikyo University School of Medicine

2-11-1 Kaga, Itabashi-ku, Tokyo 173-8605 JAPAN

Tel. +81-3-3564-2031 Fax. +81-3-5250-7748 E-mail. info@mens-health.jp

#### **Conference Secretariat**

Mediproduce Inc.

4-1-12-203 Minamiaoyama, Minato-ku, Tokyo 107-0062 JAPAN

Tel. +81-3-5775-2075 Fax. +81-3-5775-2076

E-mail. office@japanasean-mh2011.net

#### **Conference Venue**

Kenchoji

Yamanouchi 8, Kamakura City, Kanagawa 247-8525 JAPAN

Kamakura Prince Hotel

- 1-2-18 Shichirigahama-higashi, Kamakura City, Kanagawa 248-0025 JAPAN
- \*No smoking is allowed in the conference area.
- \*Mobile phones must be switched off in the meeting rooms.
- \*Unauthorized recording (video and /or audio) and photography are not allowed.

#### **Conference Language**

All sessions will be conducted in English.

#### **Registration Hours**

June 30	17:00-20:00	Kamakura Prince Hotel
July 1	08:00-18:00	Kenchoji
July 2	08:00-18:00	Kenchoji
July 3	12:30-16:30	Kamakura Prince Hotel

#### **Registration Fee**

Category	Pre-Registration	On-site Registration
Physician	30,000 YEN	35,000 YEN
Member (JSMH / AAMH) *1	25,000 YEN	35,000 YEN
Paramedic / Students *2	15,000 YEN	20,000 YEN
Accompanying Person *3	10,000 YEN	15,000 YEN

1) To register for membership, please contact the following organizations:

JSMH (The Japanese Society of Men's Health)

AAMH (Society for Anti-Aging Medicine in Urology)

- 2) Paramedic / Student identification will be required to provide proof of filing status by submitting a copy of valid student card and/or an official letter of verification to the Secretariat by e-mail, fax, or mail.
- 3) An accompanying person is a participant's family member or other personal relation who does not have business or scientific interest in the Congress.

#### <Entitlements>

Items Included in Registration Fee

\* Registration fees for Physician, JSMH / AAMU Member, Paramedic / Student include:

Participation in the Scientific Program

Final Program & Abstract Book

Welcome Reception (June 30)

Kenchoji Tour (July 2 1 hour)

Zazen Practice in English (July 2 1 hour)

Gala (July 2)

\* Registration fees for Accompanying person include:

Welcome Reception (June 30)

Kamakura City Tour (July 1 Half day)

Kenchoji Tour (July 2 1 hour)

Zazen Practice in English (July 2 1 hour)

Gala (July 2)

#### **Pre-Registration**

Participating tickets will normally be sent via mail to persons who completed pre-registration. For those who completed pre-registration within days of the conference or those who live overseas, we will send an exchange ticket by e-mail. Please bring the exchange ticket to the registration desk at the conference. At that time you will receive a Congress bag and conference related materials at the registration desk.

#### **On-site Registration**

At the registration desk, please pay your registration fee and receive your name tag.

#### **Badges**

All registrants have been issued badges, which MUST be worn to gain admission to all the scientific sessions and social programs.

#### Certificates

Delegates can collect their certificate of participation at the Registration Desk.

#### **Exhibition Hours**

 July 1
 10:00-17:00
 Oshinkaku (Kenchoji)

 July 2
 09:00-17:00
 Oshinkaku (Kenchoji)

#### Lunch, Coffee & Tea Break

Coffee & Tea Breaks will be served at the Exhibition Room on the 2nd floor.

We will offer Japanese Confection and Green Tea in the afternoon break on July 2.

#### **Shuttle busses**

#### From Kamakura Prince Hotel to Kenchoji by way of Kamakura Park Hotel

July 1 7:30 - 8:00 July 2 7:30 - 8:00

#### From Kenchoji to Kamakura Prince Hotel or Kita-Kamakura Station

July 1 19:15

#### From Kenchoji to Seaside Riviera (Gala)

July 2 18:30

#### **Social Program**

Welcome Reception June 30 19:00-21:00 Kamakura Prince Hotel
Gala July 2 19:00-21:00 Seaside Riviera

#### **Important Information**

All 6JACMHA participants are covered for the entrance fee (300 yen) to pass through the Kenchoji's main gate. Please always wear your conference badge (or bring 2nd Announcement) to show you are a 6JACJHA participants.

#### **Information for Presenters**

#### 1. Presentation style

- a) Please follow the chairperson's instructions.
- b) Presentation times have already been informed to all presenters.
- c) Please come to the PC operation desk which is next to the Registaration Desk 30 minutes before your presentation.
- d) All presentations must be done using a PC. Please note that there will be no slide equipment or OHP available. Please ensure that your presentation is compatible with "Microsoft PowerPoint 2007" and bring your data stored on a USB or bring in your own PC. If you prepare your presentation with Macintosh, bring your data on your own PC.
- e) Please make sure that the data is not infected by any virus by checking it with the latest antivirus software with the most up to date virus definitions.
- f) Please prepare any printed data if necessary. There will be no equipment available to make print out.
- g) Please make and bring back up data on another media device.

#### 2. Data preparation for presentation; for presenters who bring data on media devices.

- a) Please prepare your presentation so that it is compatible with "PowerPoint 2007". We'll use a PC with "OS: Windows XP / Vista"
- b) To avoid problems, such as improperly positioned characters and paragraphs, unreadable characters, and missing characters, please try to use the following fonts:

  Century, Century Gothic, Arial, Times New Roman

#### 3. Data preparation for presentation; for presenters who brings data on their own PC.

- a) Please make sure you bring your own AC adapter. We use a two-way flat type socket, so please bring an adapter if necessary.
- b) Please make sure that it can be connected with Mini D-sub 15-pin connectors which the organizer will provide. Please bring an auxiliary adapter if conversion is needed.
- c) Please check that all data appears on outside monitors beforehand.
- d) Please cancel screen saver, power saver set up or a password for start up, if it's set.
- e) Please check that all moving images and audio data appear on monitor beforehand.
- f) Please be sure to bring a back up of the data beside your own PC.

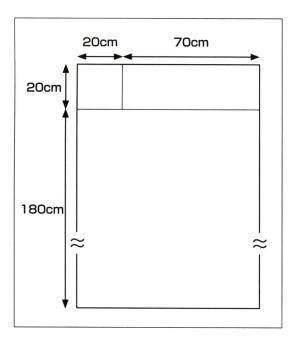
#### **Information for Poster Presenters**

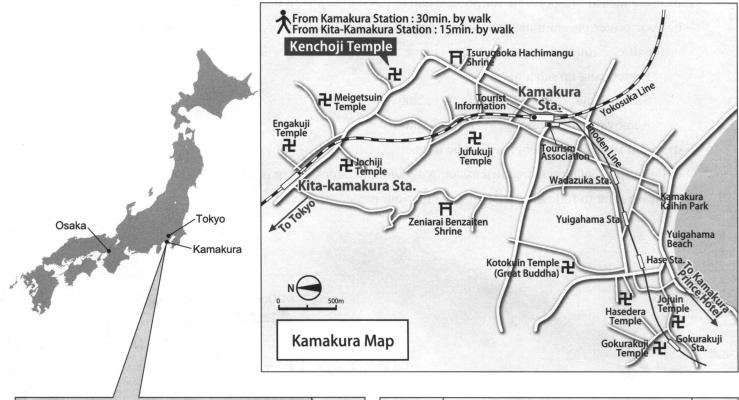
- a) Posters should be brought to the Congress and not mailed, as the Organizing Committee cannot be responsible for loss or mishandling.
- b) Presenters are responsible for posting and removing their own materials.
- c) Your poster program number will be posted on your assigned board. Please present a label showing the title, institution and the speaker's name. Pins for mounting will be available at the hall.

\*Poster hang up schedule

Set-up Time : July 1 8:30 - 12:00 Removal Time : July 2 15:00 - 18:00

- d) Audio-visual equipment may not be used.
- e) Poster presentation is free discussion without moderators. There is no discussion time.
- f) Please refer to following poster image for your poster.

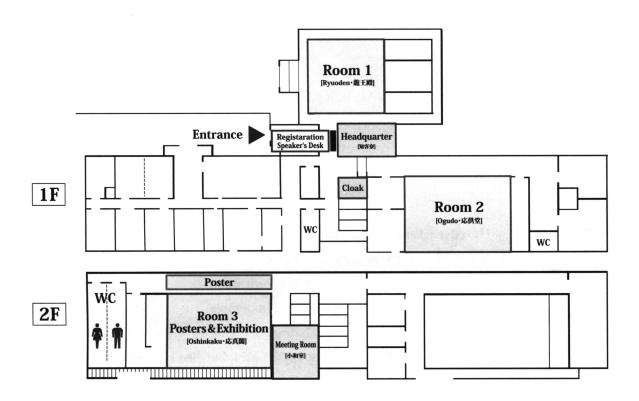






By Rail	Route [Station]	Time
From Tokyo	[ Tokyo ] => JR Yokosuka Line => [ Kamakura ]	54 min.
From Osaka	[ Shin Osaka ] => JR Tokaido Shinkansen "Nozomi" => [ Shin Yokohama ] => JR Yokohama Line => [ Higashi Kanagawa ] => JR Keihin Tohoku Line => [ Yokohama ] => JR Yokosuka Line => [ Kamakura ]	3 hr. 12 min.
By Air	Route	Time
From Haneda	[ Haneda Airport ] => Tokyo Monorail => [ Hamamatsucho ] => JR Yamanote Line => [ Shinagawa ] => JR Yokosuka Line => [ Kamakura ]	1 hr. 26 min.
	[ Narita Airport ] => JR Narita Express => [ Totsuka ] => JR Shonan Shinjuku Line => [ Kamakura ]	1 hr. 58 min.
From Narita	[ Narita Airport ] => JR Narita Line => [ Kamakura ]	2 hr. 29 min.
	[ Narita Airport ] => JR Narita Express => [ Tokyo ] => JR Yokosuka Line => [ Kamakura ]	2 hr. 37 min.

The times above are the shortest possible times, excluding the times required for transferring trains.



#### **Tour Information**

#### Kamakura Tour July 1 (Fri)

\*If you would like to join the Tour, please register at the Registration Desk.

14:40

#### Leave Kenchoji Main Gate



15:00-15:35

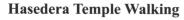


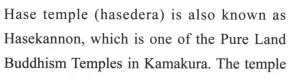
Hokokuji Temple Walking

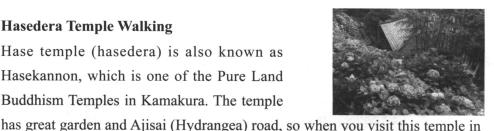
Hokokuji temple was founded by the priest Butsujo Zenji who studied under the renowned Buddhist priest Mugaku Sogen (1226-1286) when he was thirteen years old. There is a tea house in the bamboo grove, flower garden, and central garden.

June you can enjoy not only great temples, but also beautiful flowers.

16:05-16:40

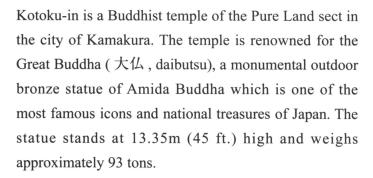






16:55-17:45

Kamakura Daibutsu and Tea Time





18:15

Arrival at Kenchoji for Kenchinjiru Party

The name kenchinjiru (vegetables soup) derives from the Zen Buddhist temple where it was first made (or so it's claimed), Kencho-ji.



19:15

Leave Kenchoji for Kamakura Prince Hotel

or Kita-Kamakura Station

#### Kenchoji Tour July 2 (Sat)

\*If you would like to join the Zazen Practice or Kenchoji Tour, please register at the Registration Desk.

07:30

#### Leave Kamakura Prince Hotel

The first shuttle bus leaves at 7:30 from Kamakura Prince Hotel. Don't miss the first bus!



08:15-09:00

#### **Zazen Practice in English**

Kenchoji is the oldest Zen training monastery in Japan and has a history of over 750 years. The Zen sect of Japanese Buddhism was the spiritual backbone of Samurai in Kamakura era.



09:00-10:00/10:00-11:00/13:30-14:30 Kenchoji Tour

Kenchoji is the most renowned of five great Zen temples in Kamakura. The oldest Zen temple in Kamakura, Kenchoji was founded by the ruling regent Hojo Tokiyori in 1253 during the Kencho Era, after which it was named. Its first head priest was Rankei Doryu, a Zen priest from China. Although considerably smaller than its heyday, Kenchoji still consists of a large number of temple buildings and sub-temples, and stretches from the entrance gate at the bottom of the valley far into the forested hills behind. After passing through the Sanmon (main gate), visitors will see Kenchoji temple bell (Bonsho), designated a national treasure, on their right.

## Program at a Glance June 30 (Thu)

	Conference Room	Floor	10:00	11:00	12:00	13:00	14:00
Meeting	Kamakura Prince Hotel Meeting Room	1F					
Welcome Reception	Kamakura Prince Hotel Banquet Hall	1F					

July 1 (Fri)

	Conference Room	Floor	7:00	8:00	9:0	00	10:00	11:00
Room 1	Ryuoden(龍王殿)	1F			Welcome Address	Opening Lecture		Symposium 1 Frail Elderly
Room 2	Ogudo (応供堂)	1F					Tea Break	Symposium 2 Sexual Medicine
Room 3	Oshinkaku(応真閣)	2F						
Poster	Oshinkaku(応真閣)	2F						
Exhibition	Oshinkaku(応真閣)	2F						

Iuly 2 (Sat)

July 2 (Sat)								
	Conference Room	Floor	7:00	8:00	9:0	0 10:00	11	:00
Room 1	Ryuoden(龍王殿)	1F			Zazen Practice in English		Sy C A	mposium 5 Cancers in Asian Male
Room 2	Ogudo (応供堂)	1F				Morning Lecture BPH	Tea Break	mposium 6 Action of estosterone
Room 3	Oshinkaku(応真閣)	2F			1 1 1	Kenchoji Tour	Kenchoji Tour	
Poster	Oshinkaku(応真閣)	2F						
Exhibition	Oshinkaku(応真閣)	2F						
Gala	Seaside Riviera	1F					0,	

July 3 (Sun) \*Lectures in only Japanese

	Conference Room	Floor	7:00	8:00	9:00	10:00	11:00
Lecture Room	Kamakura Prince Hotel Banquet Hall	1F					

15:00	16:00	17:00	18:00	19:	00 20:	00 21:0	00 22:00	23:00
			JAPAN- ASEAN Council Meeting	JSMH Executive Board Meeting				
					Welcome	Reception		
12:00	13:00	14:00	15:00	16:	00 17	:00 18:0	00 19:00	20:00
		Symposium 3 Neutraceuticals for Asian Male	or					
Luncheon Seminar 1 Cutting Edge of Men's Healt	Tea Break	Symposium 4 Men's Health an Metabolism	d Break JSM Cour Meet (Japar	ncil Oi	MH ral Cu pro (	Evening Seminar 1 tting Edge of state Cancer Japanese)	Kenchinjiru Party	
Luncheon Seminar 2 Male LUTS								
		Poster						
	E	Exhibition						
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12:00	13:00	14:00	15:00	16:	00 17	:00 18:0		20:00
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### Program

#### **PROGRAM**

#### July 1 (Friday) 8:30-9:00 (Room 1) Welcome Address -Shigeo Horie (Congress Chairperson, 6th JAPAN-ASEAN Conference on Men's Health and Aging) Yoshiaki Kumamoto (President, The Japanese Society of Men's Health) Mikio Namiki (President, JAPAN-ASEAN Council on Men's Health and Aging) Opening Lecture — — 9:00-9:45 (Room 1) Chairperson: Akihiko Okuyama (Shakaihukushi-Hojin Aizenbashi Hospital, Japan) Hui Meng Tan (Subang Jaya medical center, Malaysia) ■ISMH Lecture: The 1st European Men's Health Report - Different to the rest of the world? Siegfried Meryn (General Secretary ISMH, Medical University Vienna, Austria) APSSAM Lecture: Bone Health in the Prostate Cancer Patients Receiving Androgen Deprivation Therapy Nam Cheol Park (Department of Urology, Pusan National University School of Medicine, Korea) ■JSMH Lecture Shigeo Horie (Department of Urology, Teikyo University, Japan) Symposium 1 Frail Elderly ————— \_\_\_\_\_ 10:15-11:30 (Room 1) Chairperson: Yasuyoshi Ouchi (Department of Geriatric Medicine, Graduate School of Medicine, The University of Tokyo, Japan) Siegfried Meryn (International Society of Men's Health, Austria) ■Keynote Lecture: Frailty and Its Intervention Strategy for the Community Elderly Takao Suzuki (Research Institute, National Center for Geriatrics and Gerontology, Japan) ■ Frail Elderly Kenji Toba (National Institute for Longevity Sciences, NCGG, Japan) ■ Frail Elderly Males Hui Meng Tan (Subang Jaya Medical Centre, Malaysia) Sponsored by Takeda Pharmaceutical Company Limited. Symposium 2 Sexual Medicine ———— —— 10:15-11:30 (Room 2)

Chairperson: Tadashi Matsuda (Kansai Medical University, Japan)
Ridwan Shabsigh (Division of Urology, Maimonides Medical Center, USA)

- Keynote Lecture: Stanley E. Althof, Ph.D. for the ISSM PE Guidelines Committee Stanley E. Althof (Center for Marital and Sexual Health of South Florida, USA)
- Oral Phosphodiesterase-5 Inhibitors for Erectile Dysfunction in Asian Men Kwangsung Park (Chonnam National University Medical School, Korea)
- Current & Future Perspectives of Sexual Medicine

P. Ganesan Adaikan (Section of Reproductive Pharmacology / Sexual Medicine, Department of Obstetrics & Gynaecology, Yong Loo Lin School of Medicine, National University Hospital, National University of Singapore, Singapore)

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Chairperson: Mikio Namiki (Department of Integrative Cancer Therapy and Urology, Kanazawa University Graduate School of Medicine Science, Japan)

■ Cutting Edge in Men's Health

Ridwan Shabsigh (Division of Urology, Maimonides Medical Center, USA)

- Ageing male: Perspective on Quality of Life, Life Expectancy, Morbidity and Mortality Siegfried Meryn (General Secretary ISMH, Medical University Vienna, Austria)
- Treatment Beyond Ideology: Therapeutic Integration
  Stanley E. Althof (Center for Marital and Sexual Health of South Florida, USA)

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#### Luncheon Seminar 2 Male LUTS —

— 11:45-12:45 (Room 3)

Chairperson: Taiji Tsukamoto (Department of Urology, Sapporo Medical University School of Medicine, Japan)

■ Male LUTS in Thailand

Kavirach Tantiwongse (Faculty of Medicine, Chulalongkorn University, Thailand)

■ Antiageing /HoLEP/ Testosterone

Keisuke Saito (Department of Urology, Teikyo University School of Medicine, Japan)

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#### Symposium 3 Neutraceuticals for Asian Male ————

----- 13:15-14:30 (Room 1)

Chairperson: Apichat Kongkanand (Bumrungrad International Hospital, Thailand)
Hisamitsu Ide (Department of Urology, Teikyo University School of Medicine, Japan)

- Keynote Lecture: Isoflavone metabolism in East-Asian males and risk of prostate cancer Yoshihiko Hirao (Nara Medical University, Department of Urology, Japan)
- Isoflavone and Urinary Organ Cancer

Norie Sawada (Epidemiology and Prevention Division, Research Center for Cancer Prevention and Screening, National Cancer Center, Japan)

■ Curcumin inhibits the progression of prostate cancer through aryl hydrocarbon receptor (AhR) Shigeo Horie (Department of Urology, Teikyo University, Japan)

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#### Symposium 4 Men's Health and Metabolism —————

----- 13:15-14:30 (Room 2)

Chairperson: Michael Zitzmann (University Clinics, Clinical Andrology, Germany)
Toshiki Moriyama (Health Care Center, Osaka University, Japan)

■ Keynote Lecture: Testosterone and Metabolism

Michael Zitzmann (University Clinics, Clinical Andrology, Germany)

- Bone Metabolism and Stone Disease in Male
  - Orson W. Moe (UT Southwestern Medical Center, USA)
- Androgen action on vascular metabolism

Masahiro Akishita (Department of Geriatric Medicine, Graduate School of Medicine, The University of Tokyo, Japan)

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#### Council Meeting (The Japanese Society of Men's Health/Japanese) - 14:50-15:30 (Room 2)

#### Oral Session (The Japanese Society of Men's Health/Japanese) —— 15:30-16:30 (Room 2)

Chairperson: Yoshikazu Sato (Medical Corporation Sanjukai Hospital, Japan)

Toshiyasu Amano (Department of Urology, Nagano Red Cross Hospital, Japan)

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----- 16:45-17:45 (Room 2)

Chairperson: Yukihiro Kondo (Department of Urology, Nippon Medical School, Japan) Haruhito Azuma (Department of Urology,Osaka Medical College, Japan)

Tomohiko Ichikawa (Department of Urology, Graduate School of Medicine, Chiba University, Japan)

Yukihiro Kondo (Department of Urology, Nippon Medical School, Japan)

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#### July 2 (Saturday)

#### Morning Lecture BPH —

- 9:15-10:15 (Room 2)

Chairperson: Yoshiyuki Kakehi (Department of Urology, Kagawa University Fuculty of Medicine, Japan)

■ Benign Prostatic Hyperplasia in Japan

Naoya Masumori (Sapporo Medical University, Japan)

■Benign Prostatic Hypertrophy / Lower Urinary tract symptom (BPH/LUTS) and Erectile Dysfunction (ED) in Japan

Hiroshi Okada (Department of Urology, Dokkyo Medical University, Koshigaya Hospital, Japan)

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#### Symposium 5 Cancers in Asian Male —

— 10:45-12:00 (Room 1)

Chairperson: Hideyuki Akaza (Department of Strategic Investigation on Comprehensive Cancer

Network, Research Center for Advanced Science and Technology,

Japan)

Norie Kawahara (Research Center for Advanced Science and Technology, The

University of Tokyo, Japan)

■ Keynote Lecture: Cancers in the Asian Men

Tadao Kakizoe (Japan Cancer Society, Japan)

■ Our Perspective as the Asia Cancer Forum

Norie Kawahara (Research Center for Advanced Science and Technology, The University of Tokyo, Japan)

■Improvement of Therapeutic Efficacy of Genitourinary Cancer by "Kampo", Japanese Herbal Medicine.

Etsuo Hoshino (Cancer Institute Hospital, Japan)

■ Changing Demography Of Prostate Cancer in Asia

Zulkifli Md Zainuddin (National University of Malaysia, Malaysia)

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#### Symposium 6 Action of Testosterone ———

\_\_\_\_\_ 10:45-12:00 (Room 2)

Chairperson: Michael Zitzmann (Centre of Reproductive Medicine and Andrology, Germany)

Eitetsu Koh (Department of Integrative Cancer Therapy and Urology

Kanazawa University Graduate School of Medical Science, Japan)

■ Keynote Lecture: Actions of androgen and selective androgen receptor modulator in metabolic syndrome

Toshihiko Yanase (Department of Endocrinology and Diabetes Mellitus, School of Medicine, Fukuoka University, Japan)

■ Testosterone in Women

Toshiyuki Yasui (Department of Reproductive Technology, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan)

■ Androgen Receptor Functions in Male and Female Physiology & Behavior

Takahiro Matsumoto (Institute of Health Biosciences, The University of Tokushima Graduate School, Japan / Institute of Molecular and Cellular Biosciences, The University of Tokyo, Japan)

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#### Chairperson: Masaru Murai (International Goodwill Hospital, Japan) Shigeo Horie (Department of Urology, Teikyo University School of Medicine, Japan) ■ The Great Earthquake and Tsunami – Reconstruction and The Way Forward for Japan Yukio Okamoto (Okamoto Associates, Inc., Japan) Japan's Health Policies: Problems, Possibilities and Challenges Haruo Shimada (Chiba University of Commerce, Japan) (Sponsored by ANGFA Co.,Ltd. Luncheon Seminar 4 Phosphate metabolism, a new player for men's health and longevity ------ 12:15-13:15 (Room 3) Chairperson: Eiji Higashihara (Department of Urology, Kyorin University School of Medicine, Japan) ■ Phosphate metabolism, a new player for men's health and longevity Orson W. Moe (UT Southwestern Medical Center, USA) Sponsored by Astellas Pharma Inc. Symposium 7 Infectious Disease — - 13:45-14:45 (Room 1) Chairperson: Atsushi Nagai (Department of Urology, Kawasaki Medical School, Japan) Haruaki Sasaki (Department of Urology, Showa University Fujigaoka Hospital, Japan) ■ Keynote Lecture:Genitourinary tuberculosis and male infertility Rajeev Kumar (All India Institute of Medical Sciences, India) ■ Chronic prostatitis/chronic pelvic pain syndrome and men's health Naoki Ito (Department of Urology, NTT-East Corporation Sapporo Medical Center, Japan) Sponsored by Dainippon Sumitomo Pharma Co., Ltd. / Shionogi & Co., Ltd. Symposium 8 QOL for Men's Health — — 13:45-15:00 (Room 2) Chairperson: P. Ganesan Adaikan (Obstetrics & Gynaecology, National University Hospital, Yong Loo Lin School of Medicine, National University of Singapore, Singapore) Ken Marumo (Department of Urology, Tokyo Dental College, Ichikawa General Hospital, Japan) ■ Keynote Lecture: QOL for Men's Health Kok Kit Ng (Changi General Hospital, Singapore) ■ Single Implant Procedure on Penile Prosthesis Surgery Koichi Nagao (Department of Urology, School of Medicine, Toho University, Japan) ■QOL for Men's Health in Thailand Kavirach Tantiwongse (Faculty of Medicine, Chulalongkorn University, Thailand) Sponsored by CHUGAI PHARMACEUTICAL CO., LTD. / Novartis Pharma K.K. Symposium 9 LOH — \_\_\_\_\_ 15:30-16:45 (Room 1) Chairperson: Tai Young Ahn (Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Korea) ■ Keynote Lecture: Late-onset hypogonadism Michael Zitzmann (University Clinics, Clinical Andrology, Germany) ■ How do we manage for late onset hypogonadism in accordance with Japanese guideline? Eitetsu Koh (Department of Integrative Cancer Therapy and Urology Kanazawa University

Graduate School of Medical Science, Japan)

■ Therapeutic Potentials of Selective androgen receptor modulators

Tai Young Ahn (Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Korea)

Management of undefined complains in self-referred patients for LOH syndrome in term of men's health

Yoshikazu Sato (Sanjukai Urological Hospital, Japan)

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#### Symposium 10 Kidney and Bladder Cancer —

— 15:30-16:45 (Room 2)

Chairperson: Mototsugu Oya (Department of Urology, Keio University School of Medicine, Japan)

Tatsuya Nakatani (Department of Urology, Osaka City University Graduate School of Medicine, Japan)

- Keynote Lecture: Morbidity and health-related quality of life in patients with bladder cancer Masato Fujisawa (Division of Urology, Kobe University Graduate School of Medicine, Japan)
- Current status of Laparoscopic Radical Cystectomy in Japan

  Hiromitsu Mimata (Department of Urology, Faculty of Medicine, Oita University, Japan)
- The aging and renal carcinogenesis by using 8-OH-dG as a marker
  Raizo Yamaguchi (Department of Urology, Teikyo University School of Medicine, Japan)
- Recent advancement in the treatment for metastatic bladder cancer

  Nobuo Shinohara (Department of Renal-Genitourinary Surgery, Hokkaido University Graduate

  School of Medicine, Japan)

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#### Evening Seminar 2 OAB and Men's Health ———

------ 17:15-18:15 (Room 1)

Chairperson: Yukio Homma (Department of Urology, Graduate School of Medicine, The University of Tokyo, Japan)

- Treatment satisfaction with antimuscarinics in male patients with overactive bladder Osamu Yokoyama (University of Fukui, Japan)
- Treatment approach for male OAB

Hidehiro Kakizaki (Department of Renal and Urologic Surgery, Asahikawa Medical University, Japan)

■OAB in Men

Ridwan Shabsigh (Division of Urology, Maimonides Medical Center, USA)

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#### **Evening Seminar 3 Men's Health and Vascular Disease** —

- 17:15-18:15 (Room 2)

Chairperson: Koichi Node (Department of Cardiovascular Medicine, Saga University, Japan)

- Keynote Lecture: Vascular Disease and Men's Health
  Apichat Kongkanand (Bumrungrad International Hospital, Thailand)
- Power of PDE5I for endothelial dysfunction

Akira Tsujimura (Department of Urology, Osaka University Graduate School of Medicine, Japan)

■ Periurethral injection of autologous adipose-derived stem cells for treatment of urethral sphincter deficiency: feasibility based on experimental studies

Momokazu Gotoh (Department of Urology, Nagoya University Graduate School of Medicine, Japan)

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Poster ————————————————————————————————————	(Room 3	,
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- P-01 SEMEN QUALITY OF RURAL FARMERS IN SABAH, MALAYSIA Md. Feroz Hossain (Universiti Malaysia Sabah, Malaysia)
- P-02 Correlation of successful discontinuation of testosterone supplementation with total testosterone level assessed by Sekiya's Questionnaire of LOH syndrome patients Michio Ishibashi (Department of Urology, Nara Medical University, Japan)
- P-03 Studies on Initiation of Androgen Replacement Therapy on Erectile Function in Castrated Rats

  Tomoya Kataoka (Graduate School of Pharmaceutical Sciences, Nagoya City University, Japan)
- P-04 Clinical analysis of male post-coital gross hematuria; Any considerable complications? Toshiyasu Amano (Department of Urology, Nagano Red Cross Hospital, Japan)
- P-05 Testosterone treatment improves insulin resistance
  Hajime Ueshiba (Department of Internal Medicine, Toho University School of Medicine, Japan)
- P-06 Efficacy of androgen replacement therapy in men with hypogonadal end-stage renal disease Kohei Yamaguchi (Division of Urology, Department of Surgery Related, Faculty of Medicine, Kobe University Graduate School of Medicine, Japan)
- P-07 Diagnostic efficacy of serum PSA for prostate cancer among Benign Prostatic Hyperplasia cases in Myanmar
  Mie Mie Sein (School of Medicine, University Malaysia Sabah, Jalan UMS, Malaysia)
- P-08 Improvement of symptoms of aging in males by an aged garlic extract preparation (LEOPIN ROYAL®) combined with 5 herbal or natural medicines -Comparison with traditional herbal medicines (Kampo)Hiroaki Nishimatsu (Department of Urology, Faculty of Medicine, University of Tokyo, Japan)
- P-09 Recovery of erectile function after nerve sparing laparoscopic radical prostatectomy: a comparative study between subjective questionnaires and audio-visual stimulation tests using Rigi-Scan in Japanese patients
  Hisanori Taniguchi (Department of Urology and Andrology, Kansai Medical University, Japan)
- P-10 A case report of two times success of testicular sperm extraction at 31 years and 41 years of age in men with Klinefelter Syndrome
  Hiroshi Masuda (Department of Urology Aino Hospital, Japan)
- P-11 Clinical study of male urethritis in Nagano Matsushiro General Hospital Tatsuo Nakagawa (Nagano Matsushiro General Hospital, Japan)
- P-12 Clinical evaluation of the specialized clinic for late-onset hypogonadism Mitsuhiro Tambo (Department of Urology, Kyorin University School of Medicine, Japan)
- P-13 Negative correlation between free-T and adiponectin in patients with hypogonadism Kazuhiro Sugimoto (Department of Urology, Ishikawa Prefectural Central Hospital, Japan)
- P-14 Aged caregiver's stress for demented patients and its gender differences.

  Yumi Umeda-Kameyama (Department of Geriatric Medicine Faculty of Medicine The University of Tokyo, Japan)
- P-15 WORK-RELATED RISK FACTORS OF SEXUAL DYSFUNCTION AMONG JAPANESE MEN Yumi Ozaki (Department of Urology, Toho University School of Medicine, Japan)
- P-16 Characteristic and management of erectile dysfunction after Androgen deprivation therapy for prostate cancer
  Jintetsu Soh (Kyoto Prefectural University of Medicine, Japan)
- P-17 Effect of melanotan II, a melanocortin agonist, on sexual behavior suppressed by psychological stress in male rats
  Yoshiji Miwa (Department of Urology, University of Fukui, Japan)

- P-18 Vardenafil and resveratrol synergistically enhance the nitric oxide/cyclic guanosine monophosphate pathway in corpus cavernosal smooth muscle cells and its therapeutic potential for erectile dysfunction in the streptozotocininduced diabetic rat Shinichiro Fukuhara (Department of Urology, Osaka University Graduate School of Medicine, Japan)
- P-19 Clinical effectiveness of penile venous surgery in erection.
  Joon Yong Kim (Philip and Paul Medical Institute, South Korea)
- P-20 Penile augmentation surgery by micronized human dermal tissues Joon Yong Kim (Philip and Paul Medical Institute, South Korea)
- P-21 Clinical evaulation of the lifelong premature ejaculation that ejaculates less than one-minute intravaginal ejaculation latency time (IELT)

  Joon Yong Kim (Philip and Paul Medical Institute, South Korea)
- P-22 Quality of Life of elderly males in rural areas of Northern Borneo
  Daw Khin Saw Naing (School of Medicine, Universiti Malaysia Sabah, Malaysia)
- P-23 Suppressive Effects of Eviprostat, a Phytotherapeutic Agent, on Lower Urinary Tract Symptoms (LUTS) in Prostate Cancer Patients Treated with Brachytherapy Katsuyuki Kuratsukuri (Department of Urology, Osaka City University Graduate School of Medicine, Japan)
- P-24 Treatment with a uroselective α 1-blocker improves voiding and sexual function: a study in Thai men with lower urinary tract symptoms

  Sompol Permpongkosol (Faculty of Medicine, Ramathibodi Hospital, Mahidol University,

  Thailand)
- P-25 The relationship between Gene CAG repeats length Androgen receptor and long term outcome of intramuscular testosterone undecanoate therapy in 190 Thai Late Onset Hypogonadal men
  Sompol Permpongkosol (Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Thailand)
- P-26 The management outcome of LOH syndrome in late elderly male at our Men's Health clinic Shin-ichi Hisasue (Department of Urology, Teikyo University, Japan)
- P-27 A Qualitative Inquiry on Why Men have Poor Health
  Wah Yun Low (Medical Education and Research Development Unit, Faculty of Medicine,
  University of Malaysia)

### **Abstracts**

#### **Opening Lecture**

ISMH Lecture: The 1st European Men's Health Report - Different to the rest of the world?

Siegfried Meryn

General Secretary ISMH, Medical University Vienna, Austria

The State of Men's Health In Europe Report was launched in the European Parliament on June 14th, 2011. Great improvements in average life expectancy have been made across Europe for women and men because older people – if they make it to retirement age – are living longer. But the Report shows that every year twice as many men of working age (16-64) die as women with some 630,000 male and 300,000 female deaths across the EU27 countries in this age group. These men have been neglected for too long. The ISMH and EMHF are calling for this group of men to be explicitly targeted.

Men are dying prematurely but the rates at which they do this vary enormously from country to country and even within countries according to region or social group. This is evidenced by the massive differences in male life-expectancy: just 66 years in Latvia compared to 80 in Iceland, for example - a 21% longer life. The Report says that the data proves men's health disadvantage is an issue of inequity and not biological inevitability.

The Report further proves that lifestyle changes can make a real difference if only men can be enabled to make them. Premature male death undermines the economy, undermines families, undermines women and their health and undermines our social security and health services .It also places a responsibility on policy-makers and politicians to consider the health implications of other policies such as on the economy, education, employment and housing.

#### APSSAM Lecture: Bone Health in the Prostate Cancer Patients Receiving Androgen Deprivation Therapy

Nam Cheol Park

Department of Urology, Pusan National University School of Medicine, Korea

Androgen deprivation therapy (ADT) has become the mainstay of treatment for metastatic prostatic carcinoma. Bone health in the prostate cancer patients receiving ADT is clinically important, which accelerates bone loss and increases fracture risk. Under current situation, only 34% of those who were receiving ADT had received any recommended screening, prophylaxis, or therapy for osteoporosis, and only 13% had received dual-energy x-ray absorptiometry (DEXA) scan.

The most significant loss of BMD occurs within year 1 of ADT so that early intervention to prevent skeletal morbidity in these patients is warranted. Of various ADT agents and options, bicalutamide monotherapy may cause less bone loss due to acting on the level of prostate cell. Some investigators recommended that monitored intermittent ADT is useful.

Osteopenia and osteoporosis causes no symptoms until it results in a fracture. The most common events are vertebral body compression fractures and followed by fractures of the hip, wrist, ribs, pelvis, or humerus. Pain results from collapse of the vertebra and may be exacerbated by standing or sudden movements. The most damaging complication of osteoporosis, hip fractureresult in mortality rates of about 20% in the elderly because it frequently associated with thromboembolic events and infection.

For the prevention and treatment of ADT, lifestyle modification including smoking cessation, moderation of alcohol consumption, and regular weight-bearing exercise should be encouraged with starting ADT. Supplemental calcium intake of 1200–1500 mg per day together with vitamin D of 400 IU per day, if they are Vitamin D deficient, reduces fracture rate and should be generally recommended. The bisphosphonates can also improve ADT induced bone loss due to alterations in bone mass, architecture, and quality.

Therefore, the appropriate assessment and overcome of fracture risk on time of pretreatment and follow-up should be considered in patients with ADT.

#### JSMH Lecture

Shigeo Horie Department of Urology, Teikyo University, Japan

Currently, Japanese has achieved excellent longevity in the world. The contributing factors to this longevity would be the introduction of universal coverage of health insurance, high prevalence of regular health check-up in the working place and community, and the ubiquitous availability of medical resources. However, there have emerged many problems in Japanese public health recently that endanger the sustainability of Japanese longevity. Firstly, expenditures on health are likely to grow drastically as the society gets gray. Currently, there are about three workers to every pensioner in Japan; however, the number is expected to be halved by 2050. Consequently, the increased financial demand would jeopardize the universal health insurance system. Secondly, life-style diseases, such as metabolic syndrome, ischemic heart disease and prostate cancer, are getting more common even in younger generation because of the westernized preference of diets to traditional one and less opportunity for the physical exercise. Finally, a persistent longevity gap still exists between men and women. Under such circumstances, assessment of individual testosterone level might contribute to the promotion of men's health in Japan. Recent studies suggest that testosterone level may predict the lifespan of individual. We will report the results of our cohort study that the person who has high QOL and social activity tends to have higher teatosterone level.

#### Symposium 1 Frail Elderly

Keynote Lecture: Frailty and Its Intervention Strategy for the Community Elderly

Takao Suzuki

Research Institute, National Center for Geriatrics and Gerontology, Japan

In Japan, the average life expectancy exceeds 83 years (80 years in men, 86 years in women in 2010, WHO), and elderly persons aged 65 years and older occupy more than 23% of the population. According to the increase of the elderly population, the number of persons requiring care has inevitably increased. Under these circumstances, the long-term care insurance system started in 2000 in order to share nursing care costs for the elderly among the general public.

There is a misconception that thorough implementation of lifestyle-related disease prevention will lead to care prevention. While prevention of lifestyle-related disease is undeniably important, prevention of long-term care dependence or care prevention requires a different approach. From the view points from care prevention, geriatric syndromes is the major target for prevention. Therefore, prevention of long-term care dependence includes not only the prevention of lifestyle-related diseases but also extends widely to the geriatric syndromes.

In general, while aging of the musculoskeletal system including muscles, skeletons and joints progresses rapidly in women, aging of blood vessels (arteriosclerosis) underlying vascular lesions progresses rapidly in men. Although both aging processes are detrimental for survival, aging of blood vessels may lead to fatal events such as hemorrhage and infarction. These phenomena imply that women have clearly a longer unhealthy lifespan compared to men. This trend is evident even from the status of utilization of care services provided from long-term care insurance in Japan.

In the presentation, I would like to introduce the recent strategies for not only prevention of life-style related diseases but also prevention of long-term care among the elderly according to sex differences and characteristics in Japan.

#### Frail Elderly

Kenji Toba

National Institute for Longevity Sciences, NCGG, Japan

Frailty is a concept born mid 1980, in which disease oriented approach was turned to functional assessment. Canadian initiative for frail elderly persons chaired by Howard Bergman tried to build the definition of frailty, however it is not established.

Domain of frailty contains weakness of muscle strength, mental problem and social solitude. Sarcopenia is a good clinical indicator for weakness of muscle strength. On the other hand, the role of brain for frailty has not been clear.

We propose "frail brain syndrome" to explain multiple geriatric conditions frequently associated frail elderly persons.

#### Frail Elderly Males

Hui Meng Tan Subang Jaya Medical Centre, Malaysia

The elderly population is the fastest growing cohort in the developed world. The prevalence of frailed men in Western community ranges from 27% to 58% and prevalence of prefrails is between 34.6% and 59.9%.

Frailty is associated with falls, disability, increase hospitalization and mortality, and excessive healthcare cost. Frailty also increases vulnerability to diseases, decrease physiological well being, independence and quality of life. Frailty also increases postsurgical complication, length of hospitalization and increases chance of discharge to an assisted living facility.

Management of the frail elderly men should start with a life long approach to prevent chronic diseases, and subsequently in delaying the onset, as well as severity of chronic or debilitating diseases. Active treatment to prevent onset or delay frailty include physical exercise, diet modification and medication to control chronic diseases and prevent osteoporosis, and probably hormonal replacement therapy.

Testosterone deficiency is associated with decreased muscle mass, muscle strength and increased sarcopenia. Adult hypogonadism is also found to be associated with increased dependency, impaired balance and increase falls. On the other hand, testosterone treatments have been reported to improve lower limb muscle strength, improve body composition, bone mineralisation and overall quality of life.

Optimising health throughout adult life will certainly delay and prevent premature aging and frailty. It will also help in delaying retirement which is increasingly essential to conserve pension fund, sustain or boost economies and ensuring quality golden years. Frailty and fragility in aging are inevitable. Our goals in the current era are to delay the inevitable and prevent whatever that is preventable. Life long approach to health maintenance is crucial to age healthily and delay disability and frailty. In many countries, societies need to adapt to an aging population and elderly workplace very quickly, to face the inevitable challenges of rapidly greying communities.

#### Symposium 2 Sexual Medicine

Keynote Lecture: Stanley E. Althof, Ph.D. for the ISSM PE Guidelines Committee

Stanley E. Althof

Center for Marital and Sexual Health of South Florida, USA

Introduction: Over the past 20 years our knowledge of premature ejaculation (PE) has significantly advanced. Given the abundance of high level research it seemed like an opportune time for the International Society for Sexual Medicine (ISSM) to promulgate an evidenced-based, comprehensive and practical set of clinical guidelines for the diagnosis and treatment of premature ejaculation. Method: Reviewing the literature and developing graded recommendations using the Oxford Centre of Evidence-Based Medicine system.

Results: The attached table outlines the recommendations regarding the definition, prevalence, assessment and varied methods of treatment.

Conclusion and Limitations: Development of guidelines is an evolutionary process that continually reviews data and incorporates the best new research. We expect that ongoing research will lead to a more complete understanding of the pathophysiology as well as new efficacious and safe treatments for this sexual dysfunction. Therefore, it is strongly recommended that these guidelines be re-evaluated and updated by the ISSM every 4 years.

Behavioral Leaning Objectives: After attending this presentation, the participants will be able to:

- 1.Gain knowledge regarding the definition, prevalence, assessment, and physiological and psychological contributions to PE
- 2.Learn about the various treatment options for PE
- 3.Offer feedback regarding the ISSM report

References: 1.Althof S, Abdo C, Dean J, Hackett G, McCabe M, McMahon, Rosen R, et al International Society for Sexual Medicine's Guidelines for the Diagnosis and Treatment of Premature Ejaculation. Journal of Sexual Medicine, in press.

Table 1 - Summary of PE Guideline Recommendations

Topic	Recommendation	Level of Evi-dence			
Definition of Lifelong PE	A male sexual dysfunction characterized by ejaculation which always or nearly always occurs prior to or within about one minute of vaginal penetration, and the inability to delay ejaculation on all or nearly all vaginal penetrations, and negative personal consequences, such as distress, bother, frustration and/or the avoidance of sexual intimacy				
Definition of Acquired PE	There are insufficient published objective data to propose a new evidence-based definition of acquired PE, although it believed the proposed criterion for lifelong PE might be applied to acquired PE as well	5d			
Prevalence of PE	Statistical analysis of population-based data indicate that 1%-3% of men ejaculate in under 1 minute.				
Average Ejaculatory Latency	In multinational studies the median IELT is 5.4 minutes and decreased significantly with age. Median IELT may differ between countries.	2a			
Quality of Life	Negative effects on quality of life and interpersonal difficulty related to their PE have been consistently been reported by men and their partners	1a-3a			
Etiology	The etiology of premature ejaculation is not known. To date, no biological factor has been shown to be causative in the majority of men with PE.				
Assessment	The committee agreed that there was inadequate evidence to recommend screening or case-finding for PE, either in a general population or in any sub-population. However, it is recommended that men with ED be screened for PE				
	It is recommended that clinicians utilize the screening questions in Table 2 and that clinicians take a medical and psychosocial history	5d			
	Since patient self-report is the determining factor in treatment seeking and satisfaction, it has been recommended that self-estimation by the patient and partner of ejaculatory latency be routinely assessed in clinical practice when PE is present	2b			
	The PEP or IPE are currently the preferred questionnaire measures for assessing PE, particularly in the context of monitoring responsiveness to treatment	2b			
	For lifelong PE, a physical examination is highly advisable but not mandatory and should be conducted in most if not all patients	5d			
	For acquired PE a targeted physical examination is mandatory to assess for associated/causal diseases such as ED, thyroid dysfunction or prostatitis	5d			
Treatment	There is robust evidence to support the efficacy and safety of on-demand dosing of dapoxetine for the treatment of lifelong and acquired PE. It has been approved in some countries	1a			
	There is robust evidence to support the efficacy and safety of off-label daily dosing of the SSRIs paroxetine sertraline, citalopram, fluoxetine, and the serotonergic tricyclic, clomipramine, and off-label on-demand dosing of clomipramine and paroxetine, for the treatment of lifelong and acquired PE	la			
	There is good evidence to support the efficacy and safety of off-label on-demand topical anaesthetics in the treatment of lifelong PE	1b			
	There is contradictory evidence to support the efficacy and safety of off-label on-demand or daily dosing of PDE-5 inhibitors in the treatment of lifelong PE in men with normal erectile function. Treatment of lifelong PE with PDE-5 inhibitors in men with normal erectile function is not recommended and further evidence-based research is encouraged to further understand conflicting data	4d			
	Treatment of PE with Tramadol cannot be recommended	2d			
	There is modest evidence supporting the efficacy of psychological/behavioral interventions in the treatment of PE	2b			
	Combining pharmacological and psychological/behavioral treatments may be especially useful in men with acquired premature ejaculation where there is a clear psychosocial precipitant or lifelong cases where the individual or couple's responses to PE are likely to interfere in the medical treatment and ultimate success of therapy	2a			
	There is reliable evidence to support the treatment of PE and co-morbid ED with ED pharmacotherapy. There is level 3c evidence to support the treatment of PE and co-morbid ED with ED pharmacotherapy in combination with PE pharmacotherapy	1a			
	Selective dorsal nerve neurotomy or hyaluronic acid gel glans penis augmentation may be associated with permanent loss of sexual function and is not recommended in the management of PE	4			
Outcome	Treatment outcome can be addressed in one simple, brief and validated question known as the Clinical Global Impression of Change (CGIC). It asks patients, "Compared to before starting treatment, would you describe your premature ejaculation problem as: much worse, worse, slightly worse, no change, slightly better, or much better?"	16			

#### Oral Phosphodiesterase-5 Inhibitors for Erectile Dysfunction in Asian Men

#### Kwangsung Park

Chonnam National University Medical School, Korea

Erectile dysfunction (ED) is an important worldwide health issue that has a significant, negative impact on the quality of life and life satisfaction of both the patient and his partner.

The purpose of this study was to review the randomized clinical trials of phosphodiesterase-5 (PDE-5) inhibitors to evaluate the clinical efficacy and safety of PDE-5 inhibitors in Asian men.

A search was performed in Medline and Pubmed through 2010 to analyze studies of randomized controlled trials (RCTs) for oral PDE-5 inhibitors in Asian populations.

There were five kinds of PDE-5 inhibitors for the management of ED: sildenafil, vardenafil, tadalafil, udenafil, and mirodenafil. The results of RCTs showed that these five PDE-5 inhibitors are more effective than placebo in improving erectile function in Asian men with ED, and they had similar efficacy and safety profiles.

#### **CURRENT & FUTURE PERSPECTIVES OF SEXUAL MEDICINE**

#### P. Ganesan Adaikan

Section of Reproductive Pharmacology / Sexual Medicine, Department of Obstetrics & Gynaecology, Yong Loo Lin School of Medicine, National University Hospital, National University of Singapore, Singapore

The aim of successful management of sexual dysfunction (SD) is restoration of quality of life and sexual health in couples. The advent of phosphodiesterase type-5 (PDE5) inhibition as oral therapy for erectile dysfunction (ED) has significantly revolutionized both clinical and basic research in this area. All the currently available PDE5 inhibitors have provided good safety profiles and have widened the horizon in patient choice, selectivity and efficacy. With the possibility of daily dosing and better patient compliance, measures including intracavernosal injections and non-pharmacological treatments have formed the second-line therapy. Some promise is also bestowed by nitric oxide donors, guanylate cyclase activators, potassium channel openers, Rhokinase inhibitors, melanocortin-stimulating hormone analogs, endothelin antagonists and others. Silencing of PDE5 isoenzyme and cloning of NOS have opened a new era in gene and stem cell therapy with prospects of regenerative and preventive approaches. Other management attempts for male SD have underlined the central role for erection/libido/arousal, physiopharmacology of ejaculation and their specific drug discoveries.

In the aging male, late-onset hypogonadism is seen together with other physical changes such as increase in abdominal fat, loss of libido, decrease in strength, lean body mass, bone density and cognitive functions, similar to symptoms of androgen deficiency in younger men. Testosterone supplements may be useful in this group of patients (also improve the PDEI efficacy). Understanding female sexuality and opening the hidden potential through socio-cultural changes and drug therapy for respective female SD (arousal, desire, pain and orgasmic disorders) have ensured a holistic couple care. Furthermore, studies have established the causative roles of metabolic syndrome including high lipid (cholesterol and triglyceride) profile, hypertension, diabetes mellitus and obesity in male and female SD in addition to endothelial dysfunction and aging. Therefore, the timely inception of preventive measures including lifestyle modifications may hold promise for the future.

#### Symposium 3 Neutraceuticals for Asian Male

Keynote Lecture: Isoflavone metabolism in East-Asian males and risk of prostate cancer

Yoshihiko Hirao<sup>1</sup>, Kiyohide Fujimoto<sup>1</sup>, Nobumichi Tanaka<sup>1</sup>, Hideyuki Akaza<sup>2</sup>

<sup>1</sup>Nara Medical University, Department of Urology, Japan

Incidences of prostate cancer in East Asia have been reported less frequently when compared to Europe and America. However, prostate cancer morbidity in East Asia is rapidly increasing in last two decades. It is clear that the promotion of PSA screening seems to be a main factor, but changes in life style may also contributed to raising prostate cancer incidence.

Among various change of life style, the influence of food, especially intake of isoflavone is reported significantly differ from those in Europe and North America.

In this paper, we report our recent results of isoflavone study focusing on 1) serum isoflavone levels of male in Japan and Korea by age, (2) influence of isoflavone intervention in healthy male. Daidzein, one of the components of isoflavone, is converted into Equol by intestinal bacteria. Equol conjugates with DHT, and involved in the growth of the prostate acting as pytoestrogen.

Chronological changes of serum isoflavone levels in Japanese and Korean male revealed that isoflavone level are lower in young generation than that of  $50 \le$  of age, and detection rate of Equol is significantly low in the younger generation. This tendency is observed in the male of United States and Germany.

When administrate isoflavone, 60mg/day for 2 months for healthy male, LDL cholesterol was declining significantly, whereas HDL-cholesterol increased. Serum and urine level of Equol was significantly increased in Equol-producer, but not in Equol non-producer.

From our data, Isoflavone is useful in men's health, and may suppress the growth of prostate keeping slight higher levels of Equol for long time in Equol producer.

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#### Isoflavone and Urinary Organ Cancer

Norie Sawada

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The incidence of prostate cancer is much lower in Asian than in Western populations. However, Japanese migrants to the USA and Brazil were to have an increased incidence and the incidence rates of latent or clinically insignificant prostate cancer in autopsy studies among men from Asian countries and the United States have shown to be similar. It has therefore been suggested that environmental factors may play an important role in the progression of prostate cancer. Asian populations consume large quantities of soy food which contained isoflavones such as genistein and daidzein. Genistein and daidzein exhibit anti-carcinogenic properties and estrogenic activity in vitro, and have demonstrated a protective effect against prostate cancer development in some animal studies. On these bases, isoflavones have been recognized as key substances that may decrease the incidence of prostate cancer in Asia.

We previously reported an inverse association between dietary isoflavones and localized prostate cancer risk among Japanese men in Japan Public Health Center based-prospective cohort study (JPHC Study). Moreover, we also found the high blood levels of genistein and equol, which is metabolized from daidzein, were associated a decreased risk of localized prostate cancer in a nested case-control study in JPHC Study. Results from a meta-analysis suggested that consumption of soy foods may be associated with a reduction in prostate cancer risk in men. On the other hand, there are few epidemiological data on the relationship between dietary soy and other urinary organ cancers.

Recent interest has focused on whether isoflavones have chemopreventive effects. Given that Japanese consume isoflavones regularly throughout life, we do not yet know the period during which the effects of isoflavones on prostate cancer are preventive. Further research is required, including well-designed clinical trials in humans.

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Curcumin inhibits the progression of prostate cancer through aryl hydrocarbon receptor (AhR).

Shigeo Horie

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One specific feature in Japanese men's health is the rapid increase in the mortality and morbidity of prostate cancer. Researchers have explored a number of possible dietary factors contributing to prostate cancer risk. Recently we have reported that curcumin inhibits the expression of androgen receptor in prostate cancer *in vivo* and *in vitro*. (Ide et al. Prostate 2010.) Curcumin has a high affinity with AhR, a dioxin receptor. AhR is an E3 ligase and can ubiquitinate androgen receptor. We further studied the effect of curcumin on prostate cancer cells.

Curcumin induced apoptosis in prostate cancer cells by activating ATM. Curcumin inhibited the transcriptional activity of AhR examined by the XRE-driven reporter gene assay. Curcumin and 3MC, an agonist of AhR, inhibited the cell mobility. Knockdown of AhR by siRNA stimulated cell mobility, while the introduction of constitutively active form of AhR decreased it. Curcumin decreases the expression of androgen receptor specifically.

In conclusions, curcumin inhibits the progression of prostate cancer. AhR may be involved in the cancer progression by inhibiting cell mobility, which seemed to be independent from its transcriptional activities.

#### Symposium 4 Men's Health and Metabolism

Keynote Lecture: Testosterone and Metabolism

Michael Zitzmann

University Clinics, Clinical Andrology, Germany

In men, testosterone (T) is essential for the development and maintenance of various specific tissues with reproductive and nonreproductive tasks. In general, T exerts a wide-spread pattern of effects on metabolism, psyche and body composition. This is most obviously seen in the difference between men and women. T-deficiency is associated with a magnitude of pathophysiological symptoms, clinically known as hypogonadism. Physicians define this condition by adverse traits in physical appearance, disturbed mental and cognitive traits, shifts in body composition, namely increased body fat content and reduced muscle mass. Physical abilities in androgen-deficient men are further attenuated by lower oxygen supply due to decreased hemoglobin concentrations and by poor glucose utilization. Also bone tissue is subject to strong regulation by T and its aromatization product, estradiol. Type 2 diabetes mellitus is an increasing pathological entity and represents an established risk factor for the development of atherosclerotic vascular disease. Insulin resistance is the hallmark feature of type 2 diabetes and is simultaneously an important component of the metabolic syndrome, a pre-clinical condition also including high visceral fat content, arterial hypertension and an inflammatory status. There is evidence to suggest that testosterone is an important regulator of insulin sensitivity in men. Observational studies have shown that testosterone levels are low in men with diabetes, visceral obesity, coronary artery disease and the metabolic syndrome. Regarding the age-related aspect of these morbidities, this is of special importance in men with LOH. Short-term interventional studies support the assumption that testosterone replacement therapy in hypogonadal men induces respective clinical improvements, also concerning inflammatory markers and cardiac status. Hypogonadism may play a role in the pathogenesis of insulin-resistant states and androgen replacement therapy could be a potential treatment for improvements in glycemic control and reduction of cardiovascular risk, particularly in diabetic men. Nevertheless, long-term studies are required to determine the potentially beneficial role of testosterone in this regard.

#### Bone Metabolism and Stone Disease in Males

Orson W. Moe UT Southwestern Medical Center, USA

While kidney stones affect men more frequently than women, osteoporosis is more common in women than in men. However, these are not necessarily unrelated conditions and kidney stones and bone disease may represent different spectra of the common underlying pathophysiology. In addition, male osteoporosis is in fact not a small public health problem but for some reason has eclipsed attention compared to the female counterpart. We will review the clinical data that links kidney stones with osteoporosis and address specific issues about male osteoporosis.

#### Androgen action on vascular metabolism

Masahiro Akishita

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In contrast to the vasoprotective action of estrogen, androgen has been considered a bad guy for cardiovascular disease and metabolism. However, recent epidemiological studies have found that androgen deficiency is associated with higher mortality largely due to cardiovascular disease in community-dwelling elderly men. Also, the results of small-scale studies support the vasoprotective effects of androgen replacement therapy in men with androgen deficiency, although clinical trials are required to establish the efficacy of androgen replacement therapy. In parallel with the progress in clinical studies of men's health, mechanisms of androgen action are being investigated in the field of vascular metabolism.

At the symposium, I will overview these topics and introduce our recent clinical and basic studies on vascular action of androgen. These include: 1) Low plasma testosterone levels are associated with cardiovascular disease risk, metabolic syndrome and endothelial dysfunction in Japanese men (Akishita M, et al. Atherosclerosis 2010; Hypertens Res 2010; Hypertens Res 2007). 2) Testosterone rapidly induces NO production via androgen receptor (AR)-dependent non-genomic activation of eNOS in vascular endothelial cells via direct interaction of AR with p85  $\alpha$  (Yu J, et al. Endocrinology 2010). 3) AR-dependent transactivation of growth arrest-specific gene 6 mediates inhibitory effects of testosterone on vascular smooth muscle cell calcification (Son BK, et al. JBC 2010).

#### Symposium 5 Cancers in Asian Male

Keynote Lecture: Cancers in the Asian Men

Tadao Kakizoe

Japan Cancer Society, Japan

According to the WHO statistics 2000, worldwide, 10 million people are diagnosed with cancer annually, 6 million people die of the disease and over 22 million people are cancer patients. The total cancer burden is highest in affluent societies such as lung, colorectum, breast and prostate cancers due to smoking and western lifestyle. In developing countries, up to 25% of tumors are associated with chronic infections. The most frequently affected organ sites are liver (HBV, HCV), cervix (HPV), lymphoid tissue (EB), stomach (HP) and urinary system (Schistosoma haematobium). Cancer patterns in male are quite different in Eastern Asia and south-East Asia, i.e., Asia is full of variety.

Cancer patients and families are suffering from society's discrimination and misunderstanding. Based on the spirit of Bushido written by Inazo Nitobe in 1899, we have to protect such vulnerable people as cancer patients, their families and cancer survivors by abolishing the prejudice, misunderstanding and stigma.

#### Our Perspective as the Asia Cancer Forum

Norie Kawahara, Yuka Matsushiba

Research Center for Advanced Science and Technology, The University of Tokyo, Japan

The Asia Cancer Forum has consistently highlighted the importance of sharing the current perceptions and perspectives of cancer specialists with regard to the inclusion of cancer in the global health agenda.

In the present global situation, due to changing patterns of disease trends, non-communicable diseases, and cancer in particular, are becoming a significant global challenge. These shifting global health challenges, which to date have focused on maternal and child health and infectious diseases predominantly in regions such as Sub-Saharan Africa, are now beginning to be recognized as issues in Asia. In recent years research and development related to cancer has tended to concentrate on increasingly specialized areas, making it all too easy to lose sight of the bigger picture. Aiming to place cancer on the global health agenda will help to demonstrate how cancer research can contribute to the wellbeing of humanity on a global scale and can also be expected to lead to realization of the social value of cancer collaboration in Asia, which until now has remained piecemeal. Just as globalization is rapidly advancing, so too is cancer rapidly spreading through Asia and the impact of changes in biological and cultural factors that are impacting historical ethnic characteristics are bound together with national frameworks and medical structures for combating cancer. While mechanisms are being devised that will be able to communicate the facts relating to changes in lifestyle habits and customs to all generations, in order to fully understand the rapidly changing situation and respond fully to the challenges it presents, what is needed is not merely a revamped medical structure that seeks to catch up with the social transformations that are occurring, but also research-based, scholarly knowledge that also takes into account historical and social changes.

Improvement of Therapeutic Efficacy of Genitourinary Cancer by "Kampo", Japanese Herbal Medicine.

Etsuo Hoshino Cancer Institute Hospital, Japan

BACKGROUNDS: "Kampo Support Clinic (KSC)" was founded in 2006 in the Cancer Institute Hospital, Tokyo, for the purpose of palliating various symptoms of cancer patients with "Kampo", Japanese herbal medicine. I will present in this symposium the practice in KSC with special reference to the male genitourinary (GU) cancers.

PATIENTS: More than 200 cancer patients including 40 new comers were treated per month in KSC. Total number of patients so far treated is about 2000 including 60 GU cancer patients. Their complaints were chemotherapy-related peripheral neuropathy, difficulty in urination after GU surgery, frequent urinations, urinary incontinence, general fatigue, radiation proctitis, etc.

METHODS: The patients were treated with Kampo in combination with Western medicine. The herbal formulas used to treat patients were; (1) selected vitalizing formula (Hochu-Ekki-To, Juzen-Taiho-To, or Ninjin-Youei-To), (2) selected formula to treat stagnant blood flow (Keishi-Bukuryou-Gan, Touki-Shakuyaku-San, or Toukaku-Jouki-To), (3) selected formula to supplement the inborn energy (Hachimi-Jiou-Gan or Gosha-Jinki-Gan), and (4) the formula selected according to the Kampo diagnosis mainly based on the abdominal wall patterns. These formulas were given alone or in combination.

RESULTS: Marked responses by Kampo formulas are as follwes. (1) General fatigue, bowel movements, anorexia and insomnia were improved in the majority of patients. (2) Chemotherapy-induced peripheral neuropathy got improved with Gosha-Jinki-Gan in a part of patients. Acupuncture was effective for some selected cases. (3) Residual cancer of the urinary bladder after chemoradiation therapy was cured by Juzen-Taiho-To. (4) Irritation of urinary bladder after irrigation with BCG was cured by Seishin-Renshi-In. (5) Hot-flush and muscle weakness after anti-androgen therapy were improved with Daisaiko-To and Keishi-Bukuryou-Gan. (6) Radiation proctitis after radiotherapy for prostate cancer was improved by Hochu-Ekki-To.

CONCLUSION: Integration of Western and Kampo medicines will bring about higher QOL and longer survival as the results of improved symptoms, nutrition and immunity. "Kampo" can be a powerful supplement to improve the therapeutic efficacy of GU cancer.

#### Changing Demography of Prostate Cancer in Asia

Zulkifli Md Zainuddin National University of Malaysia, Malaysia

There has been a recent trend in Asia towards increasing incidence of prostate cancer, some low-risk regions, such as Japan and Singapore reporting a more rapid increase than in high risk country. The Incidence of prostate cancer has risen by 5-118% in the indexed Asian countries. Incidence at centres in Japan rose as much as 102% whislt the incidence in Singapore increased 118% from 6.6 to 14.4 per 100,000 person -years. The lowest incidence was in Shanghai, China and the hishest rates were in Rizal Province in the Philipines, although still much lower than those in the USA and many European countries.

The mortality data for prostate cancer showed similar rising trend.

This lecture will discuss about the possible causes of the rising trend in prosate cancer in Asian Men.

### Symposium 6 Action of Testosterone

Keynote Lecture: Actions of androgen and selective androgen receptor modulator in metabolic syndrome

Toshihiko Yanase

Department of Endocrinology and Diabetes Mellitus, School of Medicine, Fukuoka University, Japan

Androgen is an important factor for determining body composition in males. Abdominal obesity is inversely correlated with serum androgen levels in men. Androgen receptor (AR) null male mice revealed late-onset visceral obesity, accompanying energy balance abnormality. We identified a novel synthetic steroid, S42 as a promising candidate of a selective androgen receptor modulator (SARM). Results of the whole-cell binding assay using COS-7 cells exogenously expressing various steroid receptors indicated that S42 specifically binds to AR and progesterone receptor. When orchiectomized Sprague-Dawley rats were administered with S42 for 3 weeks, the muscle weight of the levator ani was increased as markedly as that induced by dihydrotestosterone (DHT), but the weight of the prostate was not elevated at any doses in contrast to DHT. The plasma concentrations of gonadotropin and adiponectin, those are downregulated by DHT, was unaffected by S42. In addition, although the plasma triglyceride level was unaffected by DHT, it was significantly reduced by S42. This effect of S42 was associated with suppression of the SRBP-1c-mediated lipogenic and insulin-desensitizing pathway in the liver and visceral fat. Taken together, S42 works as an AR agonist in muscle and as an AR antagonist in the prostate, accompanying beneficial potentials on lipid metabolism.

#### Testosterone in Women

Toshiyuki Yasui, Sumika Matsui, Satoshi Yamamoto, Minoru Irahara Department of Reproductive Technology, Institute of Health Biosciences, The University of Tokushima Graduate School, Japan

Menopausal symptoms such as hot flashes, night sweats, vaginal dryness, urogenital atrophy and bone loss due to an abrupt decrease in circulating estrogen level are well-known in women during the menopausal transition. In addition, increase in LDL-cholesterol level and reduction of insulin sensitivity are found in postmenopausal women. On the other hand, the effect of testosterone on women's health has not been fully elucidated since the magnitude of change in total testosterone level during the menopausal transition is small compared to that in estrogen level. We demonstrated that circulating total testosterone level in postmenopausal women was extremely low compared to that in same-aged men. In addition, levels of free and bioavailable testosterone gradually decreased with age, although these levels were also very low. Several lines of evidence have suggested that high testosterone level is associated with increased risk of cardiovascular disease, central adiposity, increased triglyceride, decreased HDL-cholesterol level, insulin resistance and metabolic syndrome. High circulating testosterone level has also been shown to increase the risk of developing breast cancer in postmenopausal women. On the other hand, female androgen insufficiency is a recently described syndrome in women characterized by the presence of reduced androgen level in the circulation that leads to an impairment in sexual drive, reduced libido, depressed mood, and signs and symptoms of limited androgen exposure such as decreased muscle mass, reduced bone density and decreased sense of well being. Even if circulating testosterone level in women is extremely low, an appropriate level of testosterone may play important roles in metabolic, psychological and sexual functions.

#### Androgen Receptor Functions in Male and Female Physiology & Behavior

Takahiro Matsumoto<sup>1, 2</sup>, Shigeaki Kato<sup>2</sup>

Androgen receptor (AR) mediates diverse androgen actions, particularly reproductive processes in males. To elucidate physiological significance of AR in target tissues, we succeeded in disrupting the AR on the X chromosome using a Cre-loxP system. Male AR-null mutant (ARKO) mice exhibit abnormalities typical of testicular feminization mutants, including female external genitalia with atrophic testis. They also develop late-onset obesity with glucocorticoid overproduction and impaired bone growth coupled with high bone turnover. Moreover, essential role of AR for normal folliculogenesis suggests that androgen/AR signaling is also physiologically important in females.

On the other hand, the physiological role of AR-mediated androgen signaling in brain masculinization has not been established. This is because testicular androgen, testosterone is believed to be mediated by binding to estrogen receptors after being aromatized to estrogen in neural cells. To address this issue, we used ARKO mice to investigate perinatal brain masculinization underlying the expression of male-typical behaviors. ARKO males showed impaired male sexual and aggressive behaviors, but no female sexual behavior was induced. Furthermore, while DHT-induced masculinization of female brain at the perinatal stage led to adult female mice sensitive to both E2 and DHT with the expression of male-typical behaviors, such responses were completely abolished in ARKO females. These data provide genetic evidence that once the brain is perinatally masculinized though liganded-AR, the sexually developed brain becomes sensitive to both androgen and estrogen with regard to the expression of male-typical behaviors in adulthood<sup>(1)</sup>.

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### Symposium 7 Infectious Disease

Keynote Lecture: Genitourinary tuberculosis and male infertility

Rajeev Kumar

All India Institute of Medical Sciences, India

Genitourinary tuberculosis (GUTB) is one of the commonest extra-pulmonary manifestations of tuberculosis and continues to be a significant clinical problem in developing countries. While the major issues surrounding GUTB are renal function loss and bladder contracture, infertility is one of the uncommon but disabling sequlae in both men and women. Among men, the commonest pathology is the anatomic distortion of the reproductive tract either by granulomas or the fibrosis that accompanies healing. The site of obstruction and nature of tissue involvement often defines the possibility of medical or surgical resolution. Men with discrete obstructions in the vas deferens or the ejaculatory ducts may respond to microsurgical reconstruction or trans-urethral surgery. Some men with early epididymal involvement may also show a return of sperm in the ejaculate following oral antitubercular therapy. For the others, in-vitro fertilization following surgical sperm retrieval is the only option.

Diagnosis of GUTB, particularly that affecting the reproductive organs, is often difficult. A supportive history is not always available and a strong suspicion along with a few signs such as a beaded vas, thickened epididymis or an abscess may lead to the diagnosis.

#### Chronic prostatitis/chronic pelvic pain syndrome and men's health

Naoki Itoh<sup>1</sup>, Yasuharu Kunishima<sup>2</sup>

Chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) is a complex disease characterized by chronic pelvic pain and urinary symptoms and impairment quality of life in men. Prostatitis-like symptoms are relatively common in adult men, with an estimated prevalence of 4.9% in Hokkaido, Japan and in North America ranging 2.2% to 9.7%. At least 90% of all cases of CP/CPPS are attributable to non-bacterial chronic prostatitis. However, treatment with antimicrobial agents, especially, fluoroquinolones, is routinely used for chronic prostatitis, although it is recommended that antimicrobial treatment should be reserved for bacterial prostatitis. We reported clinical efficacy of gatifloxacin (unfortunately, this drug has not been available according to its adverse events of hypoglycemia), one of fluoroquinolones, on the treatment of chronic prostatitis. The gatifloxacin treatment resulted in significant reductions in the scores on the Japanese version of the National Institutions of Health Chronic Prostatitis Symptom Index (NIH-CPSI) 4 weeks and 8 weeks after treatment. Recently, however, treatment strategies with some evidence of efficacy include alpha-blockers. Results of meta-analysis of data from several CP/CPPS randomized placebo controlled studies indicated that the use of alpha-blockers provided a statistically significant benefit. Successful management of CP/CPPS presents a difficult challenge for us because of lack of evidence-based treatment options. However, the available treatment options for CP/CPPS should be required to improve men's health.

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#### Symposium 8 QOL for Men's Health

Keynote Lecture: QOL for Men's Health

Kok Kit Ng

Changi General Hospital, Singapore

The discipline of Men's Health reflects the problems that aging men face. It comprises of many different and disparate disciplines, emphasizing on the different domains of symptoms that aging men may have. Because of the multi-factorial nature and nebulous features of aging, it is necessary to formulate the quality of life (QOL) issues that affect aging men, so that the approach to treatment can be crystallized. As QOL is essentially subjective, assessment of QOL has often been in the form of the instrument of questionnaires. The questionnaire should ideally be self administered, sensitive and specific. It should be good as a screening tool as well as a monitoring tool for the efficacy of intervention.

The questionnaires available specific for Men's Health issues include the St Louis University Androgen Deficiency in Aging Male (ADAM), the Aging Male Survey (AMS) and the Massachusetts Male Aging Study (MMAS). Sensitivities for ADAM and AMS are good, but specificities for all three questionnaires are poor. ADAM and AMS may be useful screening tools for late onset hypogonadism (LOH) as such, but they cannot be relied on for the diagnosis of LOH, and this is reflected in the latest ISSAM guidelines.

The AMS score has 3 domains – psychological, somatic and sexual, these being the major issues facing the aging men, and where androgen replacement therapy might possibly help to improve these functions. However, QOL involves more than what can be achieve through androgen replacement alone. Disease specific questionnaires like IPSS for urinary issues may help to elucidate other problems that affect the QOL of the aging men.

Looking forward, as advocates of the discipline of Men's Health, we should be constantly striving to define what QOL issues that are important, and to measure them, so that we can bring rigor to this field of study.

#### Single Implant Procedure on Penile Prosthesis Surgery

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#### INTRODUCTION

Over a period of 18 years, from 1992 to 2010, we performed penile prosthesis surgery on 62 patients, for whom the satisfaction rate was 93% and the complication rate was 13%. The complications mainly occurred because the corpus cavernosum is narrower in Asian men. This study compared the satisfaction rates for single and dual noninflatable penile prostheses.

#### PATIENTS AND METHODS

The 62 patients investigated in the present study received noninflatable penile prosthesis implants and were followed up for at least 10 months. The reasons for the implant included complications due to diabetes; previous unsuccessful prosthesis surgery; intrapelvic surgery for cancers of the prostate, bladder, and rectum; brain disorders; renal failure; Peyronie's disease; arteriosclerosis; and damaging masturbation habits.

Preoperatively, local anesthesia (penile block) was administered to 44 patients, and general anesthesia was administered to the remaining 8 cases. Dual-implant AMS600 and AMSDuraII prostheses were implanted in 43 patients, and single-implant AMS600 and Genesis prostheses were implanted in the remaining 9 cases. In the single-implant procedures, the tip of the penile prosthesis was secured to the septum of the corpus cavernosum with 4-0 Tyclon to prevent dislocation.

#### RESULTS

Among the 43 patients who received dual-implant AMS600 or AMSDuraII prostheses, 10 (23%) developed complications within 1 to 168 months postoperatively (average: 10 years 9 months). These included unilateral perforation, infection, and/or persistent pain. In contrast, of the 19 patients receiving single implants (AMS600, 4cases; AMSDuraII 2 cases ;Genesis, 13cases), no complications were observed during a follow-up period ranging from 10 months to 15 years (average: 2 years 8 months). DISCUSSION

When single-implant, non-inflatable, prostheses were used, the complication rate was 0%. Potential problems regarding implant dislocation and limited penile width can be successfully addressed by the use of appropriate countermeasures.

#### QOL for Men's Health in Thailand

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In 2003, Thailand Erectile Dysfunction Epidemiological Study Group (TEDES) had performed the nationwide study in Thailand from 13 areas included Bangkok, the metropolitan, and representative provinces from northern, northeastern, eastern, and southern part. 2269 men were directly interviewed. The overall prevalence of erectile dysfunction was 42.18%. Severity increased by age from 3.26% of severe ED in 40-49 years old to 32.92% in 60-70 years old. The main risk factors were hypertension, diabetes, hyperlipidemia and gastrointestinal diseases. Only three percent went to see the medical doctors. Ignorance, local herbal medicines, paraffin injection, counterfeit medicines, and PDE5 inhibitors solved problem. Thai Urological association has increased the public awareness of the erectile dysfunction as a predictor of the major vascular diseases. The media and pharmaceutical companies were involved in this health promotion. Widely understanding in the last five years had rising. Housewife was one of the main people who urged patient to make a consultation. Three PDE5 inhibitors are prescribed, sildenafil, vardenafil, and tadalafil. Penile injection of vasodilators was used in small numbers. Penile prosthesis surgery were limited because the price of instrument and hospitalization.

#### Symposium 9 LOH

Keynote Lecture: Late-onset hypogonadism

Michael Zitzmann

University Clinics, Clinical Andrology, Germany

In men fertility persists until very old age; simulteously, an age-associated decrease in testosterone levels exhibiting a marked inter-individual variation is observed. Subnormal testosterone levels are not a general, but frequent feature of aging men. This age-related deterioration of androgen production can be seen as a combined dysfunctionality of both the central and peripheral parts of the sex steroid regulation system and is named "late-onset hypogonadism" (LOH). The direction as well as the weighting of pathological processes within such a dysbalance may vary, and LOH presents with low to low-normal testosterone concentrations and LH levels which may be slightly decreased, normal or elevated. There is no clear-cut definition of age in relation to LOH. Usually described as disease met in "aging" men, the nosology with its typical hormone constellations can also be found in men of "younger age". In principal, it is a diagnosis made after exclusion of other causes for hypogonadism.

A central clinical question is whether the decrease of androgen levels described as LOH translates physiologically. Such clinical evidence could be sought in similarities between the symptoms of men with LOH and symptoms of other hypogonadal men as well as general symptoms of aging men. In this regard, one has to be aware that aging is most often accompanied by a decline of many physiological, cognitive and sexual functions since the incidence and prevalence of chronic diseases affecting these parameters increases with aging. Such chronic diseases are mainly atherosclerosis, diabetes mellitus and obesity. Thus, in view of the multifactorial origin of aging symptoms, effects of LOH may not clearly be detectable. However, evidence from hypogonadism in younger men suggests a range of androgen-dependent functions, for which an adverse affection by LOH can be assumed. Especially the beneficial effects of testosterone substitution on these morbidities provide evidence for a significant role of androgens within the symptomatology of elderly men with LOH. These will be discussed in the following and some of the above mentioned points will be revisited in special relation to the aging process in men.

How do we manage for late onset hypogonadism in accordance with Japanese guideline?

now do we manage for fate offset hypogonadism in accordance with Japanes

Eitetsu Koh

Department of Integrative Cancer Therapy and Urology Kanazawa University Graduate School of Medical Science, Japan

In Japan, Life Expectancy at birth has been prolonged rapidly. Additionally, fertility rates and total number of births have been also gradually decreasing. Consequently, the proportion of elderly is rapidly growing. It is often seen in older persons with physical and mental disorders. One of this cause is recognized as decreasing androgen level, namely 'late-onset hypogonadism (LOH)' syndrome or testosterone deficiency syndrome (TDS). LOH syndrome is the clinical and biochemical syndrome associated with aging accompanied by a deficiency in testosterone. And it may result in detriment in the quality of life and adversely affect the function of multiple organ systems.

In 2007, The Japanese Urological Association and Japan society of Aging male issued a Clinical Practice Guideline for LOH syndrome. This guide line shows how to test, how to diagnosis and how to treat to every aging male for Japanese clinicians. This guideline was adopted analogue free T as indication of androgen displace treatment (ART).

Today in Japan, treatment for LOH is carried out according to the this guidelines.

We use the value of 8.5 pg/ml for -2SD from young adult mean value, and 11.8 is the value of 70% of young adult mean value. Therefore, men with less than 11.8 pg/ml is the indication of ART. Treatment for LOH is recommended to be carried out 250mg testosterone depot intramuscular every 4 weeks according to the this guidelines.

Clinical trials are in progress to extend these observations to assess for the effectiveness of ART for the treatment of LOH. We will indicate preliminary data and suggest how manage LOH syndrome. Judgment of the treatment is essential based on the physician and based on guideline of aging male committee.

#### Therapeutic Potentials of Selective androgen receptor modulators

Tai Young Ahn

Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Korea

The effects of testosterone are modulated at cellular level by the steroid-converting enzymes within the particular target tissue. In reproductive target tissues, testosterone can be considered to be a prohormone, being readily converted by 5 a -reductase to the more potent 5 a -dihydrotestosterone. In other tissues, such as adipose tissue and parts of the brain, testosterone is converted by aromatase to the estrogen, estradiol. In bone, the mechanism of action of the anabolism of androgens has not been entirely elucidated but both a direct effect of testosterone and a mediated effect by aromatization to estradiol are important. In the human skeletal muscle, 5 a -reductase activity (either type 1 or 2) is not detectable, so testosterone itself is chiefly binding to the androgen receptor.

Concerns about long-term risks of prostate and cardiovascular disorders in older men treated with testosterone have encouraged considerable investment in the development of selective androgen receptor modulators (SARMs) that have anabolic effects on the muscle, but do not have adverse effects on prostate and cardiovascular outcomes. They are intended to have the same kind of effects as androgenic drugs like anabolic steroids but be much more selective in their action, allowing them to be used for many more clinical indications than the relatively limited legitimate uses that anabolic steroids are currently approved for. SARMs can be classified into four categories: aryl propionamide, bicyclic hydantoin, quinoline, and tetrahydroquinoline analogs.

Clinically, SARMs may offer unique therapeutic potential to androgen therapy and ultimately those that maintain the anabolic actions of androgens without causing virilization would greatly expand the therapeutic options for women. Generally, all include an anabolic effect in muscle and bone, but the androgenic effects are modified to varying degrees from stimulatory, to weak or neutral, depending on the disease state.

#### Management of undefined complains in self-referred patients for LOH syndrome in term of men's health

Yoshikazu Sato, Hitoshi Tanda Sanjukai Urological Hospital, Japan

Back ground and aim: Testosterone (T) has a significant physiological roles for men's health. However, the association between late-onset hypogonadism (LOH) and age-related T deficiency remains a controversial concept. Because symptoms of LOH syndrome are non-specific and mimicked by other prevalent diseases. Self-referred patients for LOH syndrome complain various undefined symptoms such as depressive feeling, malaise, hot flash and sexual dysfunction. Although those symptoms are not always associated with low serum T level, they impair patients' QOL. I would like to review clinical findings and managements for undefined complains in the self-referred patients for LOH syndrome.

Results: We analyzed 957 patients who visited our clinic from 2002 to 2010. Mean age was 54y.o. (23-83y.o.) 1)Hormonal findings: Mean serum total T and free T level were 3.9ng/ml and 10.3pg/ml, respectively. 6 % and 31% of all patients showed low total T (less than 2.0ng/ml) and free T (less than 8.5pg/ml) according to the Japanese guideline, respectively. 2) Depressive symptoms are dominant in the patients. They include depressive mood, malaise, fatigability, sleep problem, anxiety and etc. Our previous study demonstrated that 42 percent of all patients were major depression disorder (MDD). Screening for MDD and related disorder (panic disorder, anxiety neurosis) is an essential step in differential diagnosis of the LOH syndrome. 3) Hot flash and sweating, sexual dysfunction, dizziness, ear noise, headache, shoulder stiffness, muscle pain were other important complains. Correlations between T level and severity of those symptoms were not found. Efficacy and rationale of androgen replacement therapy for those complains are still unclear. It is necessary to treat and support for each symptom appropriately. A recent report demonstrated that sexual symptoms were essential for definition of LOH syndrome. Sexual symptoms are considered as not only treatment-target but also a diagnostic tool.

Conclusion: The management for undefined complains in self-referred patients for LOH syndrome have clinical importance in term of men's health.

#### Symposium 10 Kidney and Bladder Cancer

Keynote Lecture: Morbidity and health-related quality of life in patients with bladder cancer

Masato Fujisawa

Division of Urology, Kobe University Graduate School of Medicine, Japan

In Japan, the incidence of bladder cancer (BC) has gradually increased, consisting of approximately 3.5% and 1.5% of all malignancies developed in male and female patients, respectively, while the mortality rates of BC in Japanese men and women were 2.1% and 1.4% of all deaths due to malignant tumors, respectively.

The current treatments for non-muscle invasive BC is consisting of transurethral resection (TUR) and intravesical instillation therapy, which could generally provide favorable clinical outcomes in patients with this diseases. Recently, several novel approaches, such as second-TUR and maintenance therapy with BCG, have been introduced into the clinical practice for further improving the prognosis of these patients.

In contrast, radical cystectomy (RC) and urinary diversion has been considered to be the standard therapeutic strategy for muscle-invasive BC. Because of the recent advances in several aspects associated with this procedure, cancer control for muscle-invasive disease by RC could be acceptable without affecting postoperative mortality as well as morbidity, resulting in the achievement of satisfactory quality of life (QOL).

At our institution, RC and neobladder reconstruction, particularly that using sigmoid colon, has currently been preferred to select for appropriately indicated patients with invasive BC. Postoperative of health-related QOL in 90 patients, who underwent RC and sigmoid colon neobladder creation, was assessed using SF-36 survey, and showed that there were no significant differences in five of the eight scale scores between the sigmoid neobladder group and an age-matched Japanese population, and one scale score in the neobladder group was even significantly superior to that in the control population.

Collectively, these findings suggest that the current approaches for BC could safely be performed and that health-related QOL in BC patients seems to be generally favorable, even if that in those with invasive diseases.

#### Current status of Laparoscopic Radical Cystectomy in Japan

Hiromitsu Mimata, Fuminori Sato Department of Urology, Faculty of Medicine, Oita University, Japan

Radical cystectomy remains the gold standard for muscle invasive and high-risk superficial urothelial cancers of the urinary bladder. Major and overall complications of open radical cystectomy was reported to be 10-12% and 30-60%, respectively and associated with 2-3% perioperative mortality in large, contemporary series. In attempt to decrease the morbidity of the operation, minimally invasive techniques have been employed mainly for the extirpative portions of the procedure.

The first reported laparoscopic radical cystectomy (LRC) for bladder cancer was performed in 1993 by Sanchez de Badajozo. Since then there have been numerous reports of LRC. However, as LRC is one of the most difficult procedures in urologic surgery, it has been performed in limited hospitals. As LRC was approved as highly advanced medical care by the Japan's Ministry of Health, Labour and Welfare in 2010, many Japanese urologists attempt to perform it.

Extirpation of the urinary bladder and lymph node dissection is performed laparoscopically, but urinary diversions such as ileal conduit and neobladder are usually undertaken through mini-laparotomy skin incision. Recently, extended pelvic lymph node dissection is advocated to give a favorable prognosis, and it is also demande in LRC as well.

Perioperative complications of LRC such as paralytic ileus, wound infection and pulmonary complications have been reported to be less than those of open surgery. Definitive long-term oncological outcome of LRC has not yet been published, but pathological outcome, and short to intermediate onocological outcome are comparable to those of open radical cystectomy.

Current status of LRC in Japan will be presented in this lecture.

#### The aging and renal carcinogenesis by using 8-OH-dG as a marker

Raizo Yamaguchi

Department of Urology, Teikyo University School of Medicine, Japan

We investigated the accumulation of oxidative DNA damage during the aging process by using 8-hydroxydeoxyguanosine (8-OH-dG) as a marker. Meanwhile, we found the increase in the 8-OH-dG and its repair activity level in kidney after a single i.p. injection of the renal carcinogen, ferric nitrilotriacetate. In this session, we talk about the aging and renal carcinogenesis by using 8-OH-dG as a marker.

#### Recent advancement in the treatment for metastatic bladder cancer

Nobuo Shinohara

Department of Renal-Genitourinary Surgery, Hokkaido University Graduate School of Medicine, Japan

Metastatic urothelial cancer remains an incurable disease, with a median survival time of about 12 months. Although the combination of methotrexate, vinblastine, doxorubicin, and cisplatin (M-VAC) had been only effective treatment for these patients, this combination chemotherapy was associated with highly frequent treatment-related adverse events. The situation has dramatically changed by the report on combination chemotherapy of cisplatin and gemcitabin (GC) by von der Maase et al (J Clin Oncol 2000). In this randomized clinical trial comparing M-VAC with GC, GC showed clinical effectiveness in same extent and had a significantly better safety profile, compared with M-VAC. Based on these results, GC treatment is, to date, recommended for the treatment of metastatic urothelial cancer in most clinical guidelines including JUA clinical guideline for bladder cancer. However, clinical effectiveness is limited to selected patients with good performance status and good renal function (so-called "fit" cases). Systemic chemotherapy against the "unfit" elderly patients is still controversial. Recently several clinical trials have been performed to develop an appropriate chemotherapy for these "unfit" patients. Of these, the combination of gemcitabine and carboplatin (GCb) is considered to be an active regimen in these patients. De Santis et al reported that objective response (CR+PR) was observed in 42% of patients evaluated (J Clin Oncol 2009).

In this presentation, I will review the present status on the chemotherapy for metastatic urothelial cancer. Furthemore, I will present our experience on the chemotherapy against the "unfit" patients.

#### Luncheon Seminar 1 Cutting Edge of Men's Health

#### Cutting Edge in Men's Health

Ridwan Shabsigh Division of Urology, Maimonides Medical Center, USA

Men's health continues to be an important yet underserved arena of health care delivery. The challenges remain. The challenges predominantly are due to the disparity between men's and women's health with significantly shorter life expectancy than women secondary to men's reluctance in seeking help from health care services including screening modalities.

The gender gap between men and women currently in North America reveals a significant and widening disparity with a mean age of male mortality being 75.7 years versus 80.7 years. Additionally men have a higher mortality rate than women for 12 out of the 15 leading causes of death.

Chronic disorders such as cardiovascular disease and cancer account for nearly 60% of deaths and 46% of the total disease burden. It is clear that a healthy lifestyle through a combination of a balanced diet and physical activity can greatly reduce chronic disease risk. The objective of this presentation is to give a broad based overview on some of the cutting edge disparities in gender with a focus on cardiovascular disease, prostate health, male sexual and reproductive health, and obesity.

Ageing male: Perspective on Quality of Life, Life Expectancy, Morbidity and Mortality

Siegfried Meryn General Secretary ISMH, Medical University Vienna, Austria

There is an increasing longevity of much of the male population in Europa, but this is coupled with a decline in the birth rate. If the current projections for the changing male population are correct, there will be a reduction of nearly 20 for 24 million working age men (age 15-64 years) across the EU 27 by 2060 and an increase in the number of men over 65 by some 32 million. Life expectancy is lower for men than for women across the EU-member states, ranging from 66, 3 jrs for men in Latvia (77, 6 jrs for women) to 80 jrs for men in Iceland (82,2jrs for women). Men generally identify themselves as having better health than women, though this may not accurately reflect their actual level of health and wellbeing despite reporting less ill-health and less disruption to normal activities due to ill-health, the overall rate of admission to hospital is higher for men then for women for all of the principal diseases and health problems. Different patterns emerge between men and women incomes of engaging in other health-checks. Men are far less likely to undertake other tests for cancer (6 vs. 16% of women). Ageing men are less likely than women to have had their blood pressure checked in the past year (55% vs. 62% of women) or to have had a cholesterol screening test. Across Europa, ageing men access primary care services less frequently than women do. According to the results from the European male aging study (EMAS) ageing in men is characterized by worse subject and partner health, higher prevalence of concomittent morbidities, worse quality of live, higher depression, lower sexual activity, increase in erectile dysfunction(ED) and lower concern about ED. The promotion of men's health an ageing male therefore has to be incooperated into all men's health care services and any men's health consultation.

Treatment Beyond Ideology: Therapeutic Integration

Stanley E. Althof

Center for Marital and Sexual Health of South Florida, USA

Combining medical and psychological interventions for individuals or couples with sexual dysfunction offers an alternative approach to therapy that enhances efficacy, treatment and relational satisfaction, and decreases patient discontinuation. By combining the power of both and changing the way we deliver psychological care, patients may, in the long-term, derive greater benefit. I review the literature on combined therapy and propose one paradigm for combined therapy. Such combined treatment models must be conceptually sound and be subjected to reproducibility and sophisticated analysis.

#### Luncheon Seminar 2 Male LUTS

#### Male LUTS in Thailand

Kavirach Tantiwongse<sup>1</sup>, Apichat Kongkanand<sup>2</sup>
<sup>1</sup>Faculty of Medicine, Chulalongkorn University, Thailand
<sup>2</sup>Bumrungrad International Hospital, Thailand

In the last decade, Thai population grows faster in the aging group. Men age over 55 years was reaching 2.7% instead of less than 2% in 1965. The common urinary tract problems changed from sexually transmitted diseases to LUTS, most common was obstructive symptoms. BPH was widely treated with alpha-blockers and TURP is still the standard treatment. Combination medical therapy with 5ARI has been proposed a few years ago with the general acceptance from patients and general practitioners. The irritative symptoms were managed by anticholinergic after history taking and physical examination was performed. Urodynamics study can be done in some centers. Thai Urological Association (TUA) has published the practice guideline for The Medical Council of Thailand. The problems still overwhelm but TUA is going to increase the number of trainings. The new technology is introduced to the community such as laser and robotic-assisted surgery in the last 5 years. We are gaining the experience in these fields of surgery even it did not cover by any national insurance policy.

#### Antiageing /HoLEP/ Testosterone

Keisuke Saito, Hisamitsu Ide, Raizo Yamaguchi, Satoru Muto, Shigeo Horie Department of Urology, Teikyo University School of Medicine, Japan

In Teikyo University Urology, we do HoLEP from October, 2006. HoLEP was postoperative, and we paid attention to that we caused increase of voided volume as well as a discharge symptom. We supposed that there was connection with vesical chronic ischemia, and the collection of urine disorder measured bladder blood flow after HoLEP preoperation. By March, 2010, we reviewed it for 118 cases during a HoLEP operation case by the bladder blood flow measurement. We used laser Doppler blood flow probe for a flexible cystoscope bottom preoperation and postoperative three months later and measured blood flow of a bladder triangular area, the right lateral wall and the left lateral wall. Furthermore, HoLEP was preoperative, and a change of serum testosterone value measured a change of IIEF5 again by after an operation. We recognized serum testosterone value, a rise of free testosterone value more significantly from after an operation. In addition, it increased about IIEF5 more postoperative three months later, and maintenance of a reproductive function, potency of amelioration were suggested. As for the HoLEP operation, the potency that it could be it was suggested for a male anti-ageing operation as well as an urination symptom, improvement of a lower urinary tract symptom such as a collection of urine symptom by amelioration of bladder blood volume, amelioration of serum testosterone value, amelioration of IIEF 5.

### Luncheon Seminar 3 Spreading Men's Health

The Great Earthquake and Tsunami –Reconstruction and The Way Forward for Japan

Yukio Okamoto Okamoto Associates, Inc., Japan

On March 11, Japan suffered the worst disaster in its history when a 9.0 magnitude earthquake struck the Tohuku region. In addition to more than 20,000 lives, the disaster obliterated whole towns and villages, shattered the region's economy, wiping out entire industries, some possibly forever.

Together with the on-going crisis at the tsunami-crippled Fukushima Daiichi Nuclear Plant, this 'triple disaster' has had a profound and detrimental impact not only on Japanese manufacturing and agriculture, but on the very psyche of the nation, prompting Japan to rethink the long-held beliefs, assumptions and structures on which it stands.

The resilience, stoicism and indefatigable spirit of the people of the Tohoku region as they deal with the aftermath of the disaster and work to rebuild their lives and their communities has rightly earned the respect and admiration of the entire world. Such fortitude and resolve in the face of indescribable loss serves as a testament to the capabilities and perseverance of the Japanese people.

On the other hand, the disaster painfully revealed that Japan lacks the strong, decisive political leadership necessary not only to coordinate and manage reconstruction and recovery but to provide the vision to take Japan forward into a new era of prosperity. Japan has been successful in creating one of the safest, richest, most modern and comfortable societies in the world. The philosophy, institutions and methods it used to do so were perfectly suited to the environment of the times.

Such nature has proved less effective in meeting the challenges of the crisis however. The disasters have exposed the vulnerabilities of Japanese industry and the current energy mix that it relies on like never before.

How Japan tackles the gargantuan task of restoring its economic vitality and the vibrancy of its society post-11 March represents its greatest challenge in more than 65 years. There are still hopes that I would like to explain in my lecture.

#### Japan's Health Policies: Problems, Possibilities and Challenges

Haruo Shimada Chiba University of Commerce, Japan

In my speech, I would like to explain first the historic achievements of Japanese medicine and medical policies as reflected, for example, by prolonged life expectancies. However, we are recently faced with many problems and defects in medical services and industry. Main reason why such problems emerged was the failure of government medical policies to meet the changes of megatrends such as aging of population, slower economic growth and the advancement of medical technology.

The government tried to control medical industry and services by strict regulations, which did not solve the problems but rather aggravated them.

With rapid aging of relatively rich population, potential medical demand of Japan is huge and rapidly growing. There are unlimited possibilities for medical industries. To realize such possibilities, we need to choose a wise mix of free and regulated choices of medical services, and of public and private insurances. Medicine is the ultimate service for people because they want health and long life. Medicine in the future is not limited to healing and preventing disease but also to enhancing the health of people and to make people happier. There are immense opportunities for medical industries if they seriously try to take care of such diverse medical demands of people.

A Suggested Outline of my Presentation

- I . Introduction
- II . Historical Achievements of Japanese Medical Policies
- ${\rm I\hspace{-.1em}I\hspace{-.1em}I}$  . Recent Problems of Japanese Medical Care and Medical Industry
- IV . Aging, Slower Economic Growth and Advancing Medical Technology
- V . Problems of Rigid Planning and Regulations by the Government
- VI . Huge and Growing Potential Medical Demand and Unlimited Possibilities for Medical Industries
- $\ensuremath{\mathbb{I}}$  . Search for a Wise Mix of Free Choice and Regulation for Medical Services
- VIII . Search for a Wise Mix of Public and Private Insurances
- IX . Medicine is the Ultimate Service for People and Most Promising Industry

#### Luncheon Seminar 4 Phosphate metabolism, a new player for men's health and longevity

Phosphate metabolism, a new player for men's health and longevity

Orson W. Moe UT Southwestern Medical Center, USA

The concept of phosphotoxicity is well known in patient with chronic kidney disease where high phosphate is associated with increased morbidity and mortality and control of phosphate is associated with better overall outcome. Much less know is the possible negative impact of phosphate on health in individuals with normal kidney function. Humans in general consume a lot of more phosphate than we need and the question is whether this excess is causing undesirable effects on health and longevity. Experimental data from model organisms strongly support his view and some evidence is accumulating in humans. The important question will be whether one should exercise some judicious dietary phosphate discretion in the general population.

#### Morning Lecture BPH

#### Benign Prostatic Hyperplasia in Japan

Naoya Masumori Sapporo Medical University, Japan

Benign prostatic hyperplasia (BPH) is a progressive disease frequently observed in elderly men. According to the Clinical Guideline for Benign Prostatic Hyperplasia in Japan, BPH is defined as "a disease that manifests as a lower urinary tract dysfunction due to benign hyperplasia of the prostate, usually associated with enlargement of the prostate and lower urinary tract symptoms suggestive of lower urinary tract obstruction."

Epidemiological studies conducted in Japan demonstrate that prostate volume as well as the internal prostatic architecture evaluated by transrectal ultrasonography is critical factors to predict the future prostate growth. It is demonstrated that progressive enlargement of the prostate during the follow-up results in symptomatic deterioration and development of BPH-related events such as acute urinary retention. In addition, there is correlation between prostate volume and bladder outlet obstruction evaluated by pressure-flow study. Thus, prostate volume is a key factor to determine the subjective and objective urinary symptoms in BPH. Several clinical studies show that alpha1-blocker is not sufficient to inhibit disease progression for patients having large prostates. On the other hand, prostate volume reduction using 5 alpha-reductase inhibitors is useful to manage the patients having large prostates. Thus, prostate volume is also important to apply the appropriate strategy for medical treatment.

In this paper, I will briefly present the natural history of BPH before intervention based on the community-based studies conducted in Japan and after intervention based on the clinical studies we performed. In addition, the trend in surgical procedures for BPH during the past 10 years in Japan will be demonstrated according to the results of a nationwide survey.

Benign Prostatic Hypertrophy / Lower Urinary tract symptom (BPH/LUTS) and Erectile Dysfunction (ED) in Japan

Hiroshi Okada

Department of Urology, Dokkyo Medical University Koshigaya Hospital, Japan

BPH/LUTS is considered to be an inevitable condition for majority of aging male not only in Japan but also in the other countries. Several reports have demonstrated that the etiology of BPH/LUTS and erectile dysfunction (ED) is the aging of the microvessels. Thus many studies support that the treatment of BPH/LUTS causes favorable effects on ED, and vice versa. In this morning lecture the following points are presented using our data.

- 1. Prevalence of ED in BPH/LUTS patients in Japan.
- 2. Prevalence of BPH/LUTS in ED patients in Japan.
- 3. Effect of treatment of BPH/LUTS on ED symptoms.
- 4. Effect of treatment of ED on BPH/LUTS symptoms.
- 5. Add-on effect of physical exercise over medication of BPH/LUTS.

#### Evening Seminar 2 OAB and Men's Health

Treatment satisfaction with antimuscarinics in male patients with overactive bladder

Osamu Yokoyama University of Fukui, Japan

Drug treatment for overactive bladder (OAB) may fail because of non-adherence or discontinuation. In particular, the patient's perception of drug effectiveness and tolerability, and the patient's satisfaction with the treatment may be useful tools both for predicting the treatment adherence and for evaluating the clinical efficacy of the treatment. However, data demonstrating whether patients are satisfied with OAB treatment or indicating which antimuscarinic is desirable for patients in terms of efficacy and/or side effects are often lacking. We here compared the patient-reported satisfaction and clinical parameters during antimuscarinic treatment between male and female patients. The subjects were 1,270 patients (mean age, 73.5 years; men, 58%) with OAB in a large, multicenter survey designed to assess patient satisfaction with antimuscarinics in the Hokuriku district of Japan. In 79.3% (n=1,007) of the 1,270 patients, antimuscarinics were used for treating OAB. The percentage of male patients with an efficacy level of "very effective" or "fairly effective" was significantly lower than that of female patients. Approximately one third of the patients treated with antimuscarinics reported a satisfaction level of "fairly bad" or "very bad". The percentage of male patients with a satisfaction level of "fairly bad" or "very bad" was significantly higher than that of female patients. We analyzed individual OAB symptoms and adverse events to determine their potential contribution to the satisfaction level in male and female patients. Insufficient improvement in nocturnal frequency was the major factor for male patients, while constipation was the major factor for female patients.

These results suggest that many OAB patients were dissatisfied with their treatment for OAB. Furthermore, we would like to analyze which drugs are most desirable to OAB patients using this same subject group.

### Treatment approach for male OAB

Hidehiro Kakizaki

Department of Renal and Urologic Surgery, Asahikawa Medical University, Japan

As the population of senior citizens in the society increases, lower urinary tract symptoms (LUTS) are becoming more prevalent and have an enormous impact on their quality of life and their perception of health. Benign prostatic hyperplasia (BPH) and overactive bladder (OAB) are the most prevalent disorders causing LUTS in aging population. About 60% of patients with BPH are associated with OAB. Because OAB affects both men and women as a highly prevalent disorder with various etiologies, OAB becomes an important target for basic and clinical researches. Many works have shown the pathogenesis of OAB from the aspect of urotheliogenic, neurogenic, myogenic and vasculogenic origin. These factors are mutually interactive and represent their complex relationship within the bladder wall.

Treatment options for LUTS/BPH include  $\alpha$ -blocker, 5  $\alpha$ -reductase inhibitor, antimuscarinic agent, PDE5 inhibitor and surgical intervention. Medical management of LUTS/BPH with  $\alpha$ -blocker and/or 5  $\alpha$ -reductase inhibitor is the first line treatment, while in male OAB patients anticholinergic medication with  $\alpha$ -blocker is often the first line treatment. Although these drugs are overall effective, there still remain refractory cases that require special considerations for management. Recent studies indicate that metabolic and vascular factors play an important role in the pathophysiology of male OAB.

In this presentation, I would like to overview treatment approach for male OAB and present the updated information about a relationship between metabolic and vascular factors and OAB in men.

#### OAB in Men

Ridwan Shabsigh Division of Urology, Maimonides Medical Center, USA

As a result of advances in the knowledge of the neuropharmacology and neurophysiology of the lower urinary tract, effective therapy does exist for the management of many types of voiding dysfunction. While it is appreciated that absolute or relative failure to empty in men results from decreased bladder contractility, increased outlet resistance or both. The absolute or relative failure of adequate bladder contractility may result from temporary or permanent alteration in any one of the neuromuscular mechanisms necessary for initiating and maintaining a normal detrusor function.

Epidemiologic studies have now reported on substantial changes in the neurophysiology and neuropharmacologic changes in the aging male. Receptor over expression or under expression may lead furthermore to these changes that predispose men to the classic symptoms of OAB or UI. Conservative management is usually the main approach to OAB/UI in men at the initial care level and is often considered to be of simple and low cost. However, the presence of significant symptoms renders conservative strategies to often be combined with medical pharmacotherapy. This presentation will focus on the numerous decade-associated changes in the male urogenital tract that may result in presentations of urgency, SUI, or mixed stress/urgency incontinence. Comprehensive pharmacologic and therapeutic strategies will be outlined with a defined correlative index as it related to the aging male.

#### **Evening Seminar 3** Men's Health and Vascular Disease

Keynote Lecture: Vascular Disease and Men's Health

Apichat Kongkanand

Bumrungrad International Hospital, Thailand

By the time you are about 50 years old, you would learn that there are so many things get involved in years health business now. The vascular disease is the number one danger, anything that result in either peripheral or central would hurt your health. Now we see that everyday patient seem to suffer from Arthrosclerosis, Hypertension, Diabetic, Hyperlipedemia and many of the patients consume similar medicine, the way of lives seem to be in similar treatment. Nowadays we have also erectile dysfunction which is also the vascular disease, hypogonadism metabolic syndrome, obesity currently the way of treatment in these syndrome is the prevention, give education to the public and explain the risk factors.

That includes

- Aging
- CVD
- D.M.
- Hyperlipedemia

#### Prevention is

- Exercise regularly
- Quit Smoking
- Watch for diet
- Rest adequately

#### Power of PDE5I for endothelial dysfunction

Akira Tsujimura

Department of Urology, Osaka University Graduate School of Medicine, Japan

Phosphodiesterase (PDE) enzymes are involved in the regulation of the nitric oxide (NO)-cycling GMP protein kinase pathway and influence smooth muscle tone. Sildenafil, the first PDE type 5 inhibitor (PDE5I) was originally developed and studied as a cardiovascular medication. After that, because the NO system has been well characterized as the main regulator of penile corporal smooth muscle relaxation and resultant erection, PDE5Is have been used for improving the action of NO through NO cycling guanosine monophosphate pathway on penile smooth muscle cells. Furthermore, PDE5Is have gained much interest in urological field because they can improve not only erectile dysfunction (ED) symptoms but also lower urinary tract symptoms (LUTS). It was shown that PDE5 is located in the transition zone of the human prostate and the human bladder neck is supplied by NO synthase (NOS)-containing nerves. In several studies, PDE5Is had a significant effect on LUTS, with a magnitude of improvement in the Impact of prostate symptom score.

Recent prospective studies have shown that ED is independently associated with a high rate of cardiovascular events. It is speculated that this high risk is mediated by endothelial dysfunction. With respect to the endothelial dysfunction, several studies with PDE5I have been reported. It was reported that a significant increase in the number of bone marrow-derived endothelial progenitor cells, which are haematopoietic stem cells in bone marrow and migrate into the peripheral circulation to promote endothelial repair and neovascularization after the administration of PDE5I, such as vardenafil. Another study showed that endothelium-dependent flow-mediated dilation significantly increased in patients receiving vardenafil but not in patients receiving placebo. These findings suggest that PDE5I has a power to restore impaired endothelial function of cavernous and brachial arteries.

I will talk the recent findings regarding a power of PDE5I for the endothelial dysfunction.

Periurethral injection of autologous adipose-derived stem cells for treatment of urethral sphincter deficiency: feasibility based on experimental studies

Momokazu Gotoh, Tokunori yamamoto Department of Urology, Nagoya University Graduate School of Medicine, Japan

Cell therapy can be applied to many disorders aiming at regenerating damaged tissue. Mesenchymal stem cells (MSCs) are multipotent adult stem cells that can proliferate into various cell types in culture. Basic research has been performed using MSCs obtained from the bone marrow, adipose tissue, or skeletal muscle for stress urinary incontinence (SUI) due to sphincter deficiency, aiming at regenerating the sphincter. The abundance of multipotent stem cells in the adipose tissue is 100 times more than that in the bone marrow and the human body is rich in the adipose tissue. The adipose tissue, therefore, has attracted attention as a source for cell therapy. Thus, for treatment of SUI, we created a treatment strategy to regenerate the sphincter using adipose-derived stem cells (ADSCs) and examined the usefulness and safety of the strategy in small animals (using cultured cells) and large animals (using non-cultured cells). ADSCs were collected from GFP-transgenic rat, cultured and injected into the periurethral zone of a nude rat; 28 days after injection, GFP- and  $\alpha$ -smooth muscle actin ( $\alpha$ -SMA)-positive cells were recognized in the injected site, with 70% of these cells merged, suggesting differentiation of injected cells into the smooth muscle. In an experiment using a rat SUI model, leak-point pressure increased when the abovementioned method was applied. The structure of smooth muscle stained with desmin, a -SMA, coproporphyrin (CP)-1, or a myosin heavy chain antibody, was recognized 28 days after injecting ARSCs that were collected and isolated from the swine subcutaneous adipose tissue by the CelutionTM system. By a series of basic studies, the usefulness, safety and clinical feasibility of this treatment strategy for SUI was confirmed, in which ADSCs were isolated from the subcutaneous adipose tissue by the CelutionTM system, and were transurethrally injected into the periurethral region without culture.

#### P-01 SEMEN QUALITY OF RURAL FARMERS IN SABAH, MALAYSIA

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The pesticides are routinely used by the farmers in Sabah, Malaysia. The aim of the present study was to assess the effects of pesticides use on semen quality among farmers in Telupid, Kundasang and Papar district of Sabah, Malaysia. Cross - sectional study was conducted and 152 volunteers participated of which 62 volunteers were exposed to pesticides, 90 volunteers were not exposed. A questionnaire was designed to record a history of pesticides exposure and other potential risk factors among them. All semen samples were collected by masturbation in a laboratory. Sexual abstinence of 2-3 days was advised to the volunteers. All semen samples were examined and analysed based on WHO (1992) guidelines. Volume, pH, sperm concentration, motility, morphology, WBC count were examined and recorded. Frequencies, independent sample t test, chi-square test were performed. It showed abnormal semen parameters were associated with pesticide exposure. The mean values of volume, pH, sperm concentration, sperm motility, sperm morphology were significantly less and WBC count was significantly high in the exposed group when compared with the non-exposed (P<0.05). Those who were exposed to pesticides had risk of having abnormal semen parameters in compare with the non-exposed group (P<0.05). And there were no significant difference observed in relation to potential risk factors. The result showed the abnormal semen parameters were associated with pesticide exposure and there was increase in the risk of impaired semen quality among people who had exposed to pesticides.

## P-02 Correlation of successful discontinuation of testosterone supplementation with total testosterone level assessed by Sekiya's Questionnaire of LOH syndrome patients

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reversible by TS.

successfully. To find factors associated with successful discontinuation of TS, we retrospectively analyzed data of total testosterone (T) level assessed by Sekiya's Questionnaire (J Jpn Menopause Soc2001; 9: 85). 117 patients were treated with TS from April/2003 to Feb/2010. 24 cases were not achieved with any satisfaction, 13 cases were stopped because of adverse effect, and the remaining 80 cases (68%) were responded with satisfaction. Of those 80 cases, 66 cases were divided into two groups; Group-C (n=33) was discontinued TS successfully within two years, in while Group-E (n=33) was continued TS with well-being status, because of failure of discontinuation. Diagnosis of LOH syndrome was made based on the clinical symptoms such as dizziness, weakness, or urge in micturition etc., corresponding to low level of free-T (less than 12pg/ml). Before TS, measurement of total-T (ng/ml) was done by the ECLIA method. And, Sekiya's questionnaire, composed of ten psychological (Category-I) and another ten physiologic (Category-II) questions, was taken. Using Sekiya's assessment of Category-I-1 question on mental status of "awareness of changes in respect to living environment", there was an equal number of patients with negative answer, 15 (45%) in Group-C and 14 (42%) in Group-E. Total-T level of Group-C was 376 ± 188 ng/ml, and that of Group-E was 530 ± 191 ng/ml (p=0.019, t-test). In while, total-T level of both groups with positive answer was not different (463 ± 127 in Group-C vs. 419 ± 169 ng/ml in Group-E). Mean age in both groups was same. In conclusion, successful discontinuation of TS was correlated with low level of total-T and negative answer of "awareness of changes". One possibility was suggested that lacking perception might be

In our series of testosterone supplementation (TS), approximately halves of TS cases were experienced to discontinue TS

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P-03 Studies on Initiation of Androgen Replacement Therapy on Erectile Function in Castrated Rats

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Objective(s): Androgen replacement therapy (ART) is performed in many clinical situations, however the effects would not be steady and more studies are needed. We planed different initiation of ART and investigated the difference of ART effects on erectile function in castrated rats.

Material and Method(s): Wistar ST rats were divided into following groups; surgical castrated rats with early androgen replacement group (early-ART group, n=6) and surgical castrated rats with late androgen replacement group (late-ART group, n=6). We started injecting testosterone propionate (3 mg/kg/day) for 4 weeks daily at just after operation as early-ART or at 4 weeks after operation as late-ART. For control groups, only castrated rats (SC group, n=6) and sham operated rats (sham group, n=6) were tested. Rats underwent erectile function testing by intracavernosal pressure (ICP) measurement in electrical stimulation of the cavernous nerve. Dynamic infusion cavernosometry (DIC) was performed. Relaxing and contractile responses of corpus cavernosum were measured by isometric tension study. For structural analyses on rat penis, masson's trichrome staining was performed.

Result(s): The ICP/MAP was significantly increased in early-ART group  $(0.57\pm0.04)$  compared with in SC group  $(0.36\pm0.05)$ . On the other hand, the ICP/MAP was not significantly increased in late-ART group  $(0.46\pm0.05)$  compared with in SC group  $(0.30\pm0.03)$ . In early-ART group, maintenance rate was tend to low compared with in SC group, but not in late-ART group. Relaxing and contractile responses of corpus cavernosum in both early-ART and late-ART groups were significantly restored from SC groups. Rats' penile smooth muscle/collagen ratios in both early-ART and late-ART groups were not significantly different from SC groups.

Conclusion(s): This study suggested that early ART improved the ICP/MAP caused by recovering corporal veno-occlusive dysfunction (CVOD). We recommend that ART be initiated on late-onset hypogonadism (LOH) syndrome patients as early as possible.

### P-04 Clinical analysis of male post-coital gross hematuria; Any considerable complications?

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Introduction: Male post-coital gross hematuria is a discomfort condition. Almost all the patients with male post-coital gross hematuria worry about underlying diseases. Various causes of post-coital gross hematuria have been reported; however, despite the clinical investigation of this disease, many questions remain unresolved. The objective of this study was to analyze clinical features of male patients displaying post-coital massive hematuria.

Materials and Methods: From 2002 to 2010, 15 males complaining of massive hematuria following sexual intercourse presented to our clinic. Backgrounds and general conditions were analyzed. Furthermore, medical findings and clinical course were evaluated. Results: The mean age of the 15 patients was  $45.0 \pm 15.1$  ( $26 \sim 70$ ) years. Three patients exhibited bladder tamponade, which necessitated the removal of blood clots from the urinary bladder by trans-urethral irrigation. Hematospermia was observed in four subjects. Anti-coagulation agents were administered in three cases. To clarify etiology and to exclude underlying urogenital malignancy, trans-rectal ultrasonography (TRUS), excretory urography, computed tomography (CT) scan, magnetic resonance imaging (MRI), urine cytology, urethrocystoscopy and prostate specific antigen (PSA) assays were conducted. Benign prostate hyperplasia and cystic lesion of the prostate were diagnosed in three and one patient, respectively. A 61 –year-old man demonstrated high PSA values (7.63 ng/ml). Positive urine cytology was not detected. Treatment for post-coital gross hemorrhage included administration of antibiotics, hemostatic agents, and careful observation. Ten patients experienced recurrent post-coital gross hematuria; however, this condition generally resolved without serious complications.

Conclusions: Male post-coital gross hematuria is an unsettling condition characterized by the occasional recurrence; however, no serious underlying diseases were observed in our clinical study.

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#### P-05 Testosterone treatment improves insulin resistance

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The metabolic syndrome involves a cluster of clinical features including visceral obesity, insulin resistance, hypertension, glucose intolerance, and dyslipidemia. Recent studies have shown that low testosterone levels are significantly associated with metabolic syndrome and type 2 diabetes.

We examined the change in insulin resistance after testosterone treatment in four Japanese men with metabolic syndrome and low free testosterone levels (age: $49.8 \pm 9.9$  yrs, BMI: $31.8 \pm 4.7$ , waist: $99 \pm 7$  cm;Mean  $\pm$  SD). Testosterone supplements were administered by intramuscular injection (250 mg every 2 weeks) for 3 to 6 months.

Fasting plasma glucose (FPG), fasting serum insulin (F-IRI), HbA1c, total cholesterol, triglyceride, HDL-C, free testosterone, BMI and waist circumference were measured. We used homeostasis model assessment (HOMA-R) as an index of insulin resistance and investigated the change in insulin resistance after testosterone treatment.

Average results before treatment were as follows: BMI  $31.8 \pm 4.7$ , waist  $99 \pm 7$ cm, FPG  $113 \pm 6$ mg/dl, F-IRI  $27.4 \pm 7.9$   $\mu$  IU/ml, HOMA-R  $7.7 \pm 2.6$ , HbA1c  $5.4 \pm 0.3\%$ , TCHO  $224 \pm 35$ mg/dl, TG  $197 \pm 68$ mg/dl, HDL-C  $44 \pm 10$ mg/dl, free testosterone  $6.0 \pm 1.0$ pg/ml. After treatment, F-IRI, HOMA-R and TCHO were significantly decreased to  $13.8 \pm 3.4$   $\mu$  IU/ml,  $3.6 \pm 1.1$  and  $195 \pm 32$ mg/dl, respectively. Free testosterone was significantly increased to  $8.7 \pm 0.6$ pg/ml.

In conclusion, these results suggest that testosterone treatment improves insulin resistance in Japanese men with metabolic syndrome and low free testosterone levels.

#### P-06 Efficacy of androgen replacement therapy in men with hypogonadal end-stage renal disease

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Background: Some recent studies have shown various positive functions of testosterone and the efficacy of androgen replacement therapy (ART) in men with late-onset hypogonadism (LOH). Although it is well known that hypogonadism is common in men with end-stage renal disease (ESRD), few studies have directly assessed the effects of ART in this population.

Objectives: We report clinical assessments of efficacy and adverse effects of ART in hypogonadal men with ESRD.

Methods: This study included 2 ESRD patients who were diagnosed with LOH according to Clinical Practice Manual for Late-onset Hypogonadism Syndrome' in Japan and treated with ART at least as long as 6 months at our institution. We administered testosterone enanthate 250mg IM every 4 weeks. Before and 6 months after the initiation of ART, we obtained aging male symptom (AMS) scale and other questionnaires, such as international index of erectile function (IIEF-5), mini international neuropsychiatric interview (MINI), and self-rating depression scale (SDS). Moreover, fasting blood samples were analyzed for sex hormones (testosterone and free-testosterone), total cholesterol (TC), high-density lipoprotein (HDL) and low-density lipoprotein (LDL) cholesterol, triglycerides (TG), aspartate aminotransferase (AST), alanine aminotransferase (ALT),  $\gamma$ -glutamyl transpeptidase ( $\gamma$ -GTP), red blood cell count (RBC), hemoglobin (Hb), hematocrit (Ht), prostate-specific antigen (PSA) and plasma glucose. Body mass index (BMI) and prostate volume were also examined.

Results: In both cases, we found improvements of psychological, physical, and sexual symptoms scores measured by the AMS scale after ART. There was no obvious evidence of adverse effects of ART. Both patients got satisfaction from the treatment.

Conclusion: ART for older hypogonadal men with ESRD may cause favorable changes in psychological, physical and sexual

conditions. However, further investigations are necessary to more precisely define the risk and benefit of ART in this population.

# P-07 Diagnostic efficacy of serum PSA for prostate cancer among Benign Prostatic Hyperplasia cases in Myanmar

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Introduction & Objectives: Prostate-specific antigen (PSA) is a protein produced by the cells of the prostate gland. PSA is present in small quantities in the serum of men with healthy prostates, but is often elevated in the presence of prostate cancer and in other prostate disorders. A blood test to measure PSA is considered the most effective test currently available for the early detection of prostate cancer. The US food and drug administration (FDA) has approved the PSA test for annual screening of prostate cancer in men of age 50 and older. However its diagnostic efficiency among Asian population is often queried. This study was done to estimate the diagnostic efficacy of serum PSA for prostate cancer among cases of BPH in the hospital setting of Yangon, Myanmar. Methods: A consecutive sample of 206 cases with provisional diagnosis of Benign Prostatic Hyperplasia (BPH) admitted to Yangon General Hospital during one year data collection period was included. Serum PSA of all cases was measured at the first encounter. Digital Rectal Examination (DRE) by experienced urologist was done as another non-invasive diagnostic procedure. The gold standard was the histological examination.

Results: 179 cases diagnosed as non-malignant by histology gave serum PSA value within the range of 3.8-12.9ng/ml. More than 75% of these cases showed serum PSA value of less than 5.9 ng/ml. Only 5 cases without malignancy provided the serum PSA value of more than 10 ng/ml. Serum PSA level was more than 20 ng/ml in all 27 cases of histologically proven prostate cancer. Serum PSA value of a well differentiated adenocarcinoma prostate of 90 years old was as high as 58ng/ml. DRE alone give correct diagnosis for 77.8% of total prostate cancer cases.

Conclusion & Recommendations: Sensitivity of serum PSA for prostate cancer in this study was 100% and specificity was 97.2%. The diagnostic efficiacy of serum PSA was found to be excellent in this study that routine screening of serum PSA for high risk population was recommended.

# P-08 Improvement of symptoms of aging in males by an aged garlic extract preparation ("LEOPIN ROYAL®") combined with 5 herbal or natural medicines –Comparison with traditional herbal medicines (Kampo)–

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"LEOPIN ROYAL®" (LER), a non-prescription health-promoting medication in Japan, is an aged garlic extract preparation combined with 5 herbal or natural medicines, namely, ginseng, oriental bezoar, velvet antler, cuscuta seed, and epimedium herb. To determine the effect of LER on symptoms of aging in males, we conducted an open-labeled, randomized clinical trial using a traditional herbal medicines (Kampo) as a control.

Forty-nine male patients (age, 62.7 (11.8) years) with mild or more pronounced symptoms of aging were enrolled and randomly assigned to treatment with LER (n=24) or Kampo (n=25, mainly kamishoyosan) for 6 months. The Aging Males' Symptoms (AMS) scale and the International Index of Erectile Function with 5 questions (IIEF-5) were tested at baseline, and after 3 and 6 months of administration of the medications.

In the AMS scale, the somatic and psychological sub-scores and total score decreased depending on the time course in both groups. However, the decrease in the slope of the LER group was greater than of the Kampo group. There was a significant difference between the groups and the group and month interaction ( $G \times M$ ), as revealed by linear mixed model analysis (P < 0.05). The IIEF-5 score increased in the LER group (P = 0.02 with regard to  $G \times M$ ).

In conclusion, the present results indicate that LER is superior to Kampo on the rate of improvement of symptoms of aging, including erectile dysfunction, in males.

# P-09 Recovery of erectile function after nerve sparing laparoscopic radical prostatectomy: a comparative study between subjective questionnaires and audio-visual stimulation tests using Rigi-Scan in Japanese patients

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Objective: In Japanese patients, sexual activity after nerve sparing laparoscopic prostatectomy (nsLRP) seems unfavorable. To evaluate the recovery of potency in Japanese patients with nsLRP, we examined erectile function subjectively and objectively, and made a comparative study.

Material and Methods: Twenty seven patients operated with nsLRP (bilateral sparing in 4, unilateral in 23) were enrolled. The mean age of the patients was 60.1 years. Seventeen of 27 patients used type 5 phosphodiesterase inhibitors on demand at least 3 months after surgery. Subjective erectile function was examined by the International Index of Erectile Function (IIEF)-15, Erection Hardness Score (EHS) questionnaires pre, 3, 6 and 12 months after surgery. Objective erectile function, measured rigidity and tumescence of penis, was evaluated by RigiScan-Plus® as the erectile response to the audio-visual stimulation test each time.

Results: IIEF-erectile function domain, IIEF-total, and EHS scores pre-treatment were  $4.7 \pm 9.8$ ,  $35.4 \pm 19.1$ ,  $3.2 \pm 0.9$ , respectively. They decreased significantly after surgery, far apart from baseline during 12 months (IIEF-EF  $5.2 \pm 5.5$ , IIEF-total  $17.6 \pm 11.8$ , EHS  $1.6 \pm 1.1$ ). On the other hand, the penile rigidity and tumescence also decreased significantly 3 months after surgery. However these values gradually improved, and almost recovered at 12 months after surgery. Recovery rates of the penile rigidity and tumescence from baseline were rigidity 92.6 % at tip, 96.3 % at base, tumescence 87 % at tip, and 76 % at base, respectively.

Conclusions: Discrepancies has been found between subjective and objective assessments of erectile function. From the objective viewpoints, the recovery of erectile function in Japanese patients with nsLRP was not bad at all. If the patients are informed of a decent result revealed by objective assessment, they gain more confidence for erectile function and sexual activity may be further improved.

## P-10 A case report of two times success of testicular sperm extraction at 31 years and 41 years of age in men with Klinefelter Syndrome

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We report a case of Klinefelter syndrome with the chief complaint of male infertility. Normal pregnancy and delivery resulting from conventional testicular sperm extraction (TESE) and intracytoplasmic sperm injection (ICSI) was possible at a previous doctor when he was 31 years old. He was referred to our hospital for treatment of infertility when he was 41 years old. Ultrasonography revealed sparse parenchyma on the right testis and normal contralateral tests. In excised tissue of the left testis, only a single seminiferous tubule containing spermatozoa was found and sperm were successfully retrieved by microdissection TESE.

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#### P-11 Clinical study of male urethritis in Nagano Matsushiro General Hospital

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The clinical features of consecutive symptomatic male patients with urethritis treated at the Department of Urology, Nagano Matsushiro General Hospital, between August 2002 and July 2008 were described. A total of 100 patients with a mean age of 33.8  $\pm$  14.3 (SD) years were diagnosed with urethritis during this period. There were 47 cases of gonococcal urethritis, 39 of chlamydial urethritis, and 14 of mixed urethritis. The source of infection was commercial sex workers (CSWs) in 48 of the 100 cases. Forty-three patients had acquired infection from their girlfriends or their wives. We failed to trace the source of infection in 9 patients. Among the 48 men that had contracted the infection from CSWs, almost half (44%) were considered to have contracted urethritis through oral sex. Drug sensitivity tests were carried out on all Neisseria gonorrhea strains. The susceptibility ratios to piperacillin, cefazolin, imipenem/cilastatin, gentamicin, minocycline, and levofloxacin were 78.3%, 95%, 100%, 85%, 95%, and 48.3%, respectively.

### P-12 Clinical evaluation of the specialized clinic for late-onset hypogonadism

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Objetive:To present the clinical outcomes of patients who visited our specialized clinic and underwent androgen replacement therapy (ART) for late-onset hypogonadism (LOH).

Patients and methods:A total of 378 patients who visited our specialized clinic between 2005 and 2011. LOH related symptoms were judged according to the Aging Males' Symptoms (AMS) scale. ART was performed in 203 patients with LOH (serum free testosterone<11.8 pg/mL). ART consisted of intramuscular injection of 125mg of testosterone esters every 2 weeks or 250 mg of testosterone esters every 3 weeks. Response to ART was evaluated by AMS scale and other questionnaire (Excellent/Good/Fair/No change/Bad) after 1 month of ART. We divided into 2 groups according to Excellent/Good (Effective group) and Fair/No change/Bad (Non-effective group) in patients who underwent ART, and compared patient background of the groups for predicting the effect of ART.

Results:Mean age of total patients was 51.6 years. Of 204 patients (54%) had depression. Of 225 patients (59%) had severe LOH related symptoms. Of 303 patients (80%) showed low level of serum free testosterone (<11.8 pg/mL). AMS score, including somatovegetative, psychological and sexual subscore, showed significant decrease after ART (p<0.01). Assessment by the other questionnaire showed that Excellent (20) account for 10%, Good (69) for 34%, Fair (56) for 27%, No change (58) for 29% and Bad (0) for 0%. There was no significant difference in characteristics of the patients between Effective and Non-effective groups. Serum free testosterone levels after 3 months of ART increased significantly (8.0 pg/mL vs. 10.5 pg/mL, p<0.01). Although hematocrit levels after ART significantly elevated as compared with pre-treatment levels (44.2% vs. 46.9%, p<0.01), no other adverse events showed.

Conclusions:Although factors predicting the response to ART remain unclear, ART for LOH may provide improvement of LOH related symptoms.

#### P-13 Negative correlation between free-T and adiponectin in patients with hypogonadism

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In Japan, the measurement of free-testosterone (FT) level is recommended in the diagnosis of late-onset hypogonadism (LOH). The prevalence rate of low circulating testosterone level is known to be high in men with metabolic syndrome. Adiponectin is an adipocyte-specific secretory protein that exhibits antiatherogenic, antiinflammatory, and antidiabetic properties. It has been recognized as a key molecule in metabolic syndrome. However, the association between FT and adiponectin in men remains controversial.

We conducted a cross-sectional study in 274 men aged 42 - 89 years (mean age: 65.2 yr). In addition to FT and adiponectin, several metabolic markers (waist circumference, triglyceride, HDL-cholesterol, blood pressure, and fasting blood glucose) were also evaluated. We diagnosed the presence of metabolic syndrome components (central obesity, dyslipidemia, hypertension, and glucose intolerance). Because anemia and chronic kidney disease have been associated with adiponectin, Hb and eGFR were also evaluated.

Age was positively correlated with adiponectin, while FT, waist circumference, eGFR, and Hb were negatively correlated with adiponectin. Multiple regression analysis showed that FT and waist circumference were significant independent variables for predicting adiponectin level (FT:  $\beta$  -0.196, t-2.926, P=0.004/waist:  $\beta$  -0.234, t-3.314, P=0.001).

In conclusion, we demonstrated that FT was negatively correlated with adiponectin independent of age and multiple metabolic risk factors.

### P-14 Aged caregiver's stress for demented patients and its gender differences.

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Background: Increasing numbers of family caregivers are confronted with depression and abuse because of stress for care. It is important to evaluate the caregiver's stress with mental examination and some biomarkers. We examined salivary alpha-amylase activity associated with stress.

Methods: 34 families were analyzed with mental health, such as WHO Quality of Life 26 (QOL26), State-Trait Anxiety Inventory (STAI), Profile of Mood States (POMS), Geriatric Depression Scale(GDS) and Caregiver's burden measured with Zarit Burden Interview(J-ZBI) and salivary alpha-amylase activity was examined with salivary at home and at hospital.

Results: 18 aged female caregivers (wife, mean age73  $\pm$  8) and 16 aged male caregivers (husband, 77  $\pm$  4) were enrolled. Female caregivers showed 6.4  $\pm$  3.8 male caregivers 4.3  $\pm$  3.0 in GDS15 , Female caregiver's POMS-Depression score(p=0.05) and STAI-Trait Anxiety score (p=0.02) are significantly worse, there is not significant differences in the same level of needing care and total care time.

The symptom, Irritation showed 50% and fatigue showed 79% in female caregivers, 15% and 23% in male caregivers. The mean salivary alpha-amylase activity level in home in male caregivers ( $322 \pm 116 \text{kU/l}$ ) is significantly higher than demented patients( $134 \pm 56 \text{ kU/l}$ )

Male caregiver's J-ZBI(r=0.67, p<0.01) and GDS15(r=0.78, p<0.01) are negative relationship between MMSE of the wife. According to the care needing levels go up, male caregivers feel fatigue and depression. Female caregivers don't have significantly change with her husband level of needing care.

Conclusions: Aged caregivers showed high frequently depression and anxiety. It is important to care not only demented patients but also caregivers, with mental examination and biomarkers.

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#### P-15 WORK-RELATED RISK FACTORS OF SEXUAL DYSFUNCTION AMONG JAPANESE MEN

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INTRODUCTION AND OBJECTIVE: The aim of this study was to find out which occupational factors account for an increased risk of sexual dysfunction among Japanese men. Although work stress is a risk factor of erectile dysfunction, the details of the relationship between the two are unclear.

METHODS: The sample included 1105 men aged 30 to 64 years old working at a factory owned by a Japanese company. A self-administered questionnaire survey was performed using the Brief Job Stress Questionnaire and the aging males symptoms (AMS) scale. Furthermore, occupational factors, taking into consideration schedule autonomy, work demands, shift patterns and the time employees return home, were also referred to. The data were collected in August 2009. Univariate unconditional logistic regression models and multivariate logistic regression models were used with general stress and sexual dysfunction as the dependent variable and occupational factors as the principal independent variable.

RESULTS: The mean age in the study was  $42.0 \pm 8.4$  years. General stress among men aged 60 to 64 years was lower than that of any other age group. The AMS scale was increased according to age. Lack of schedule autonomy was shown to lead to an elevated risk of both general stress (p=0.02) and sexual dysfunction (sexual ability/frequency: p=0.04, morning erection: p<0.01, sexual desire: p<0.01) among men aged 30 to 39 years old. Conversely, in the 40 to 49 years old, the 50 to 59 years old and 60 to 64 years old, schedule autonomy did not correlate with either general stress or sexual dysfunction. There were no differences in both general stress and sexual dysfunction for the following factors: job demands, shift work, the time employees return home.

CONCLUSIONS: This study indicated that schedule autonomy is strongly associated with male sexual dysfunction among men aged 30 to 39 years old.

## P-16 Characteristic and management of erectile dysfunction after Androgen deprivation therapy for prostate cancer

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Androgen deprivation therapy (ADT) is one of the standard treatment for prostate cancer. This treatment would be applied for patients with advanced disease for long-term period, and also for patients with localized disease in the adjuvant or neoadjuvant setting for relatively short-term period. Various adverse events of ADT have been reported such as loss of libido, hot flush, osteoporosis, erectile dysfunction (ED), anemia, depression, fatigue, gynecomastia, diabetes mellitus, metabolic syndrome, and altered body composition. Although erectile dysfunction (ED) and loss of libido have been recognized as most common and important adverse events during the treatment of advanced prostate cancer ADT because of their impact on quality of life, few studies have investigated frequency and degree of ED as well as the response to ED treatment. In contrast to the well established evidence of the relationship between ED and prostate cancer treatment by radical prostatectomy or radiation therapy, the lacking information on natural course of ED in patients who undergo ADT may results in poor management for this adverse events. Moreover, pathophysiology of developing ED in ADT may be different from RRP or radiation therapy, because ADT may cause ED not only by mechanical suppression but also by emotional alterations. In our study, we used International Index of Erectile Function 5 (IIEF-5) to evaluate the prevalence and development of ED as well as the response of phosphodiesterase (PDE) 5 inhibitors so as to investigate the optimal timing of ED treatment for patients with prostate cancer who underwent ADT.

# P-17 Effect of melanotan II, a melanocortin agonist, on sexual behavior suppressed by psychological stress in male rats

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#### Background

Melanocortins are neuropeptides derived from proopiomelanocortin and include  $\beta$  -endorphin, adrenocorticotrophic hormone, and  $\alpha$  -melanocyte stimulating hormone. Melanocortins have been reported to play a role in the control of both male and female sexual behavior. Melanotan II is a melanocortin agonist.

Objective

The aim of this study was to investigate the effect of melanotan II on masculine sexual behavior suppressed by psychological stress in rats.

Methods

Male rats were divided into 4 groups: a control group, a melanotan II administration group (M), a psychological stress loading group (PS), and a psychological stress loading and melanotan II administration group (PS + M). The rats were exposed to sham or psychological stress for 3 consecutive days. After the last stress loading, the rats were injected with vehicle or melanotan II, and we then observed their sexual behavior. The sexual behavior of each male rat was observed for 20 minutes. During the observation, the mount latency (ML), intromission latency (IL), ejaculation latency (EL), and postejaculatory interval (PEI) were recorded.

Results

The PS rats had significantly longer ML, IL, EL, and PEI than did the control, M, and PS + M rats. These parameters in the PS + M rats did not achieve the level observed in the controls. There was no significant difference in these parameters between the control and M rats.

Conclusions

Psychologically suppressed masculine sexual behavior could be partially recovered with melanotan II administration. Melanocortin agonists may be novel agents for treating psychological sexual disorders.

P-18 Vardenafil and resveratrol synergistically enhance the nitric oxide/cyclic guanosine monophosphate pathway in corpus cavernosal smooth muscle cells and its therapeutic potential for erectile dysfunction in the streptozotocininduced diabetic rat

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INTRODUCTION AND OBJECTIVES: SIRT1 is an important enzyme for many cellular processes, and promotes endothelium-dependent vascular relaxation by activating endothelial nitric oxide synthase (eNOS) in endothelial cells. However its effect on corpus cavernosal smooth muscle relaxation remain poorly defined. Resveratrol has been reported to be an activator of SIRT1. Therefore, we investigated the effects of resveratrol on NO/cGMP pathway in human corpus cavernosal smooth muscle cells (CCSMCs) which were shown to express eNOS and synthesize NO in our previous report, and its therapeutic potential for erectile dysfunction in diabetic rats. We also examined the hypothesis that a combination of SIRT1 activation and phosphodiesterase 5 (PDE5) inhibition has synergistic effect

METHODS: We measured intraceller cGMP concentration after incubation of human CCSMCs with resveratrol, vardenafil, and both. In addition, to eliminate possible nonspecific effects, the cells were also incubated with sirtinol which inhibit SIRT1. Then, to investigate erectile function, four weeks after establishment of diabetes due to streptozotocin injection, rats treated with either only vehicle, vardenafil (0.5m/kg/day p.o), resveratrol (5mg/kg/day p.o) or resveratrol plus vardenafil. After four weeks treatment, the intracavernosal pressure (ICP) were measured.

RESULTS: The levels of cGMP in human CCSMCs were significantly increased either by administration of vardenafil or resveratrol compare with those of controls. A drastic synergistic increase in cGMP was observed when treated with both agents simultaneously. Furthermore, the effects of resveratrol on cGMP synthesis were reversed by sirtinol a specific SIRT1 inhibitor. In vivo experiments, while the ICP/MAP was significantly lower in treated with only vehicle rats, ICP/MAP in treated with resveratrol rats showed significantly higher. And more, The ICP/MAP in treated with both agents was higher than all other groups. CONCLUSIONS: Resveratorol leads to enhancement of cGMP synthesis in human CCSMSs and improves erectile function in storeptozotocin induced diabetic rats, particularly with PDE5 inhibitor.

#### P-19 Clinical effectiveness of penile venous surgery in erection.

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Objectves: According to the American Urological Association clinical guidelines panel penile venous surgery is not justified for routine use. However, in most nonsurgical cases these treatment modalities are insufficient to produce adequate erection. Although penile venous surgery has almost been abandoned and the venous factor eliminated as a contributing factor to erectile dysfunction, new concepts of erection related veins has recently been described and reported in literature. We are to report clinical result of venous ligation surgery.

Materials and Methods: They were evaluated using the International Index of Erectile Function(IIEF-F) scoring system. In the dorsal area of penis, 1-2 cm from the subglans was incised at a length of 3 to 5 cm in a transverse direction with depth sufficient to expose the Buck's fascia and was then bluntly dissected up to the prepubic area. The incised area was widened with a retractor, so that the prepubic area could be seen. We ligated deep deep dorsal vein, cavernosal veins and para-arterial veins.

Results: Retrospective investigation was done for this study with 13 cases from January 2007 to September 2010. Median patient age at surgery was 45.2 years (range 22 to 54) and mean follow up was 13 months (range 2 to 39). Pre-operation average IIEF-5 score was 11 and post-operation average IIEF-5 score was 17.1 case of infection was reported.

Conclusions: Though the patients group was small in number, this venous drainage reduction surgery as the modified venous ligation surgery appears to deliver reasonable positive results with low morbidity. Patients showed improvement of IIEF-5 score by this surgery. The results obtained in this limited number of patients are promising and justify trials in larger groups.

#### P-20 Penile augmentation surgery by micronized human dermal tissues

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Introduction & Objectives: Penile augmentation surgery with tissue grafts through incision so far has been performed with; however, there might be adverse effects such as a wound problem, a scar, pain, prolonged recovery time. Another augmentation method is the injection of fat but there is the disadvantage of migration and a high reabsorption rate. As a result, current penile augmentation surgery has been pursued for rapid recovery using a simple technique and natural appearance. We are to introduce new methods for penile augmentation using acellular human dermal tissue with injection.

Material & Methods: Under the local anesthesia, according to the size of the penis and the augmentation size the patient desired, about 3-6cc of dried acellular particulate dermal matrix combined with 1.5-1.8cc of lidocaine and 0.3cc of gentamicin per 1cc of the tissue were injected to the three parts at the shaft of the penis.

Results: Retrospective investigation was done for this study with 121 cases from December 2007 to December 2009. 4cc of acellular micronized dermal tissues on average were used for a one-time injection. 2 cases of local skin necrosis were reported but it was treated through the conservatory treatment. There was little migrartion of the injected tissues after the graft.

Conclusions: This surgical method does not require an incision and resulting in short operation and rapid recovery time. There are few side effects. Therefore, for the men who experienced difficulty with penile augmentation surgery with the preexisting techniques, for example, those who had physical health problems, or were of an older age, or were on special medications, this surgical method could be recommended. It also may be considered a new technique that can be applied for partial augmentation, correction of deformity, and reconstructive surgery as well.

# P-21 Clinical evaulation of the lifelong premature ejaculation that ejaculates less than one-minute intravaginal ejaculation latency time (IELT)

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Purpose: This study aims to analyze sexual activity patterns and the results of clinical laboratory studies of the patients with lifelong premature ejaculation of less than 1 minute IELT.

Method: The subjects were those who ejaculated within 1 minute, did not have any other disease history, and no other sexual dysfunction. In this study, their sexual activity patterns were researched, penile sensitivity test, blood test, and prostatitis test were conducted.

Results: The number of subjects were 122. The threshold of biothesiometry was  $5.1 \pm 1.6$  and 32(26.2%) of them showed less than 4 threshold level. All were normal in the prostatitis test. Their thyroid hormone levels were T3  $1.1 \pm 0.3$  ng/ml, and T4  $8.3 \pm 1.7$   $\mu$ g/dl, respectively. 6(4.9%) of them showed hypothyroidism while 3(2.5%) of them showed hypothyroidism. The level of total testosterone and free testosterone was  $514 \pm 193$  ng/dl and  $12.6 \pm 5.2$  pg/ml, respectively. 4(3.3%) of them had increased level of testosterone. Their leptine level was  $3.9 \pm 3.9$  ng/mL and 75.5% of the subjects showed prolongation of the ejaculatory latency after using anesthetic cream. As for the question about the reason of their premature ejaculation, 54.5% responded that it was due to penile hypersensitivity.

Conclusion: In case of consulting the patients with lifelong premature ejaculation of less than 1minute IELT, it may be considered to take thyroid function test, testosterone hormone test and biothesiometry as a selective test. As for treatment, along with the generally-used drug therapy such as SSRIs and behavioral therapy, it is recommended to use penile sensitivity approach.

#### P-22 Quality of Life of elderly males in rural areas of Northern Borneo

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Life expectancy of Malaysia has attained up to 71.6 for males & 76.4 for females in 2010 that the aging issues would become the major health needs of Malaysia in the near future. Sabah, situated in the Northern Borneo, is the second largest state of Malaysia with 3.5 million population (2010) and an estimated elderly people of over 0.2 million. Most of the Sabah people reside in rural areas with limited accessibility. To assess the health related quality of life of rural elderly males in Sabah, 63 consented respondents from 16 villages were interviewed using WHO QOL BREF (Malay version). The majority was Rungus, an indigenous ethnic group residing in the study area. Their mean age was 69.32 years with a range of 60 to 88 and 54% was under 70 years. 33.3% of them smoke while 28.5% drinks occasionally. Most of them were married with at least one adult child. Although 53% presented with at least one sign/symptom of current illness, only 6.3% rated their QOL as poor and 12.7% expressed dissatisfaction on their own health. Mean WHO QOL BREF domain scores(4-20) obtained were 13.41 ± 1.7 for physical, 13.59 ± 1.5 for psychological,  $12.02 \pm 3.2$  for social and  $13.84 \pm 1.4$  for environment domains. The observed scores were slightly lower than the age and sex adjusted scores for Malaysia and significantly lower than the domain scores for 61+ age group reported by WHO QOL group representing 23 countries. The mean domain scores for 60-69 age-group were relatively higher than those of 70 and above group, but not statistically significant. The Aging Males' Symptoms (AMS) questionnaires (Malay trial version) were also applied and a significant negative correlation was seen between the AMS-somatic dimension composite scores and WHO QOL BREF physical domain scores. The results highlighted the applicability of those questionnaires among Sabah ethnic elderly males.

# P-23 Suppressive Effects of Eviprostat, a Phytotherapeutic Agent, on Lower Urinary Tract Symptoms (LUTS) in Prostate Cancer Patients Treated with Brachytherapy

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Objectives: Eviprostat® is an anti-oxidant, anti-inflammatory phytotherapeutic agent that is commonly used to treat lower urinary tract symptoms (LUTS) in benign prostatic hyperplasia in Japan and Germany. Prostate cancer patients treated with brachytherapy generally have complaints of LUTS for several months postoperatively.

Methods: We investigated the protective effects of Eviprostat against the development of LUTS in 37 patients, who had received 125I prostate brachytherapy as monotherapy. These patients were divided into two groups, an Eviprostat-treated group (n=18) and untreated control (n=19), whose background had no significant difference. The group treated with Eviprostat was prophylactically medicated from 3 weeks preoperatively until 3 months postoperatively. Symptom scores and QOL for urination were evaluated according to the International Prostate Symptom Score (IPSS) and Expanded Prostate Cancer Index Composite (EPIC) on preoperative day 1, and postoperative months 1, 3 and 6.

Results: Both the scores of IPSS and the levels of QOL in EPIC were significantly worse at 1 month postoperatively compared to the pre-treatment baseline, and thereafter progressively improved in both groups. Eviprostat-treated patients showed significantly better recovery compared to Eviprostat-untreated control at 6 months postoperatively, with respect to urinary summary score, urinary function and urinary irritation/obstruction subscales in EPIC. Moreover, the feeling of incomplete emptying in IPSS and the urinary irritation/obstruction subscale in EPIC were significantly improved at 3 months postoperatively compared to the peak impairment at 1 month in the Eviprostat-treated group.

Conclusions: It is possible that Eviprostat has the potential to ameliorate postoperative LUTS caused by brachytherapy.

# P-24 Treatment with a uroselective a 1-blocker improves voiding and sexual function: a study in Thai men with lower urinary tract symptoms

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Introduction: Lower urinary tract symptoms (LUTS) and erectile dysfunction (ED) negatively affect quality of life.  $\alpha$  1-blockers are effective for LUTS suggestive of benign prostatic hypertrophy (BPH). Aim: To analyze the effect of a uroselective  $\alpha$  1-blocker on both voiding and sexual dysfunction in Thai men with LUTS.

Methods: Of 488 men with LUTS who received 10 mg alfuzosin monotherapy once daily (OD) at a men's health clinic, 313 men (64%) completed 8 months of alfuzosin treatment and filled the International Prostate Symptom Score (IPSS) and (2) the International Index of Erectile Function (IIEF)-5 questionnaires.

Main Outcome Measures: The relationships among the IPSS, IIEF-5 score, and select clinical characteristics were analyzed using multiple regression analysis. To identify changes from the baseline, the chi-square or Fisher's exact test was used for categorical or dichotomous variables and a paired Student's t-test was used for continuous variables.

Results: The 313 men were followed up for a mean (SD) of 35.6 (2.2) weeks. LUTS were categorized by IPSS as moderate in 100 patients (31.9%) and severe in 213 (68.1%). ED was graded according to the IIEF-5 as normal in 46 (14.7%), mild in 29 (9.3%), mild to moderate in 81 (25.9%), moderate in 47 (15.0%), and severe in 110 (35.1%). ED is associated with LUTS (p=0.008). After 8 months of alfuzosin treatment, the mean (SD) IPSS and IIEF-5 score significantly improved from 19.95 (6.4) to 11.13 (4.6) (p<0.001) and from 11.5 (6.9) to 14.9 (5.7) (p<0.001), respectively. However, the IIEF-5 score did not improve significantly in patients with severe LUTS as determined using the IPSS. The most common adverse event with alfuzosin treatment was mild (dizziness, 2.2%).

Conclusion: Treatment with 10 mg alfuzosin OD is safe and effective in improving voiding and sexual function in Thai men with LUTS and ED.

## P-25 The relationship between Gene CAG repeats length Androgen receptor and long term outcome of intramuscular testosterone undecanoate therapy in 190 Thai Late Onset Hypogonadal men

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Objective: We analyzed the effects of normalization of plasma testosterone (T) and CAG repeat polymorphism in such Thai men. Material and Methods: Genomic DNA was extracted from peripheral blood and the CAG repeat region was amplified by PCR. Fragment analysis and sequencings was performed. The records of 190 men with LOH were reviewed and 133 men had used parenteral TU for > 12 months. The mean duration of treatment was 110 weeks (54 to 182 weeks).

Results: The repeat length CAG was between 14-31. The most CAG length was median (20-23) with low testosterone. Men with longer CAG receptor had higher levels of total T and AMS score. There was no association between repeat length and any of the anthropometric measure. Testosterone therapy was associated with a significant decline of waist circumference (p=0.039) and of percentage body fat (p<0.001), but no change of BMI. Total cholesterol and LDL cholesterol declined significantly (p=0.017 and p=0.037, respectively) and HDL cholesterol increased significantly (p=0.009), with no significant changes of triglycerides. The scores of sub-scales of AMS (psychological, somotovegetative and sexual factors) decreased (p=0.045, p=0.201 and p=0.076, respectively). The mean IIEF-5 (p=0.016) and IIEF-15 scores (p=0.035) improved no significantly. Erectile function domain, orgasmic function domain, sexual desire domain, intercourse satisfaction domain and overall satisfaction domain improved. Median PSA rose from 0.926 (0.591; 1.538) ng/mL to 1.42 (0.995; 2.165) ng/mL (p<0.001\*), with 5 patients >4 ng/mL (4.01-13.21). On biopsy there was no evidence for malignancy.

Conclusions: The results suggested the AR CAG repeat length correlates with serum T of aging men. Normalizing serum T in men with LOH resulted in improvement of the metabolic syndrome, mood and sexual functions and appeared acceptably safe.

#### P-26 The management outcome of LOH syndrome in late elderly male at our Men's Health clinic

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Purpose; It is suggested that late elderly is a growing population in Japan and it is a nation-wide problem today. To consider their QOL, the maintenance of the well-being in male is a big issue for Men's Health clinic. In the current study, we assessed the late elderly with LOH syndrome in our Men's Health clinic.

Patients and Methods; We retrospectively reviewed medical charts of 289 patients with LOH syndrome who presented at our Men's health clinic. We assessed the free testosterone level before the treatment, and the treatment modality and the outcomes were reviewed. Results; Of 289, 8 patients were over 75 years and considered as late elderly male. Median age was 78 years (range 77 to 93 years). Median free testosterone level was 5.2 pg/ml (range 1.8 to 9.0 pg/ml). Management for the symptoms of LOH syndrome consisted with no medication in 1, herbal remedy in 2, and testosterone replacement in 5. The median follow-up duration was 6 months. There was no adverse event in every management. Five of 6 patients with testosterone replacement showed the satisfaction with the treatment, and both with herbal remedy showed moderate satisfaction.

Conclusions; In this study, even for late elderly male patients with LOH syndrome, testosterone replacement is effective and tolerable. Herbal remedy might be useful for the patients who are not candidate for testosterone replacement.

#### P-27 A Qualitative Inquiry on Why Men have Poor Health

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Background: Men's poorer health than women has been well documented worldwide. The effects of urbanization with changes in lifestyle, men's health beliefs and behaviors, men's societal status have affected men's health.

Objectives: This paper explores why men have poorer health compared to women and what could be the contributing factors to the gender differences in health status in Malaysia.

Methods: A qualitative study utilizing 6 focus groups consisting of 52 men aged 40-60 years. All interviews were tape-recorded and transcribed verbatim. NVIVO 2 was used for data management. Content analysis was used to extract themes emerging from the group discussions.

Results: The men cited 3 attributes they believed contributed to men's poor health: unhealthy lifestyle, stress and their attitude (including male ego). In addition, they perceived women have better health status because they are more health conscious, have a healthier lifestyle, have better coping skills in life stresses, get more opportunities to go for health screening and have the maternal instinct to stay healthy.

The men also felt that the healthcare system is more skewed towards women's health and therefore men's health is neglected.

Conclusion: Men recognized that women had better health than them. The reasons for the gender differences in health status are viewed as multifactorial, ranging from worse male factors to better female factors and attitudes as well as a biased health care system towards women's health.

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