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理事長序

各位會員好：

接任理事長一職已將近二年了，這二年來學會的業務運作及學術活動的推廣一切順利，其中最值得一提的是，學會獲得內政部的極高度肯定，於民國 98 年 11 月 6 日獲頒「97 年度全國性優等社團」，在全國約九仟個社團中，我們榮獲第九名，這要歸功於秘書長的全力協助、理監事們的積極參與並提出寶貴的意見，以及各委員會的全力配合。去年歲末，理監事開會決定於民國 99 年 3 月 5 日和 6 日兩天在台中縣南山人壽教育訓練中心舉辦本會『99 年第六屆第三次會員大會暨第卅三次學術演講會』，並推舉吳錫金主任為本次大會會長，張進寶主任及張兆祥主任為大會副會長。

這次大會分為兩個部份，第一部份為 Pre-Congress Symposium，已邀請數位國內男性學資深醫師和國外學者擔任專題演講的 speakers，內容包括 Section I： Highlights of 12th APSSM，和 Section II：Recent Advances in Sexual Medicine。第二部份為學術演講會，內容包括一般論文演講、得獎論文發表、四位國外學者的專題演講、醫學倫理以及感染防治議題，內容相當豐富且精彩，請大家拭目以待。

此次特別要感謝吳錫金主任及其幕僚們的協助。他們精心策劃各項會前工作、規劃場地課程、協調行程、整合硬體設備及人力調派，使大家能在一個舒適的環境下來進行學術研討會，讓我們大家一起感謝他們辛苦的付出。

在此特別要呼籲各位會員同道們，除了開會吸收新知和交換心得之外，希望大家能充分利用會議以外的閒暇時間，一同在大肚山上觀看美麗的星空和雲彩，享受清風拂面，更可體驗清新溫泉飯店的溫潤美人湯，夜晚還可俯瞰大中部地區的青翠山林，在滿天星斗的陪伴下愉快入眠！

總之希望這次的醫學會議，能讓與會醫師都覺獲益良多，且有難忘、回味無窮之感。最後，

敬祝　大家　身心健康
　　　大會　圓滿成功

王起杰　謹識
2010.03.06
於高雄醫學大學附設醫院

大會會長序

歡迎各位親愛的台灣男性學醫學會會員、會友及遠道來的貴賓們再度來到台中參加一年一度的盛會。本院曾於民國九十年舉辦男性學醫學會年會，感謝各位先進再次給予中國醫藥大學附設醫院泌尿部這個機會，承辦今年男性學醫學會年會，這是我們極大的光榮，也是對我們的考驗。感謝理事長、秘書長及學會秘書同仁們在籌備過程中給予我們的指導，使得籌劃工作能順利進行。

本次會議我們邀請本院泌尿部張兆祥部主任及彰基泌尿外科張進寶主任擔任大會副會長，陳國樑醫師擔任秘書長，大家群策群力，從會場的動線指標到會議流程皆反覆推敲，為讓各位貴賓度過美好的會議而努力。今年年會場地選在大肚山上南山人壽教育訓練中心，設備先進、風景優美，夜間可俯瞰整個台中盆地夜景，附近的清新溫泉度假飯店提供優質的住宿設施。在會議安排方面，加強了星期五下午研討會的內容，將歡迎晚宴移至當天晚上，並安排了精采的節目，期盼能帶給大家一個愉快且難忘的夜晚。

「大肚山」，地跨清水、沙鹿、龍井、大肚、神岡、大雅、台中市西屯區、南屯區、台中縣烏日等鄉市鎮，豐富的人文、自然資源、居高臨下的寬廣視野，再加上緊鄰市區，近而成為民眾休閒踏青、觀夜景的好去處。附近有很多的歷史及觀光景點，在會議之餘，我們也為會員及眷屬安排了休閒之旅。台中是一個日漸閃亮的城市，目前人口已達一百零七萬人，蓬勃、發展、充滿熱情，期待各位能好好感受台中的風土人情。最後，要感謝全體會員、會友能蒞臨台中參與此盛會。

敬祝

吉祥如意　闔家安康

大會會長
中國醫藥大學附設醫院主任秘書兼泌尿腫瘤科主任

吳錫金敬上
99年3月6日

大會注意事項

壹、論文發表

一、⑴分一般論文及論文獎口頭發表兩組。
⑵每題演講及討論：一般論文10分鐘，論文獎15分鐘；一般論文7分鐘（論文獎12分鐘）時第一聲鈴響，8分鐘（論文獎13分鐘）第二聲鈴響並開燈，演講即應結束，隨即討論2分鐘。
⑶敬請演講者嚴格遵守，謝謝合作。

二、外賓特別演講
每題演講及討論共35鐘；29分鐘時第一聲鈴響，30分鐘時第二聲鈴響並開燈，演講即應結束，隨即討論5分鐘。

三、如果演講未結束，請座長提醒演講者時間已到。如演講時間已到，即開燈結束演講並省略討論。

四、敬請各座長嚴格控制演講及討論時間，以利節目進行。

貳、一般事項

一、報到
報到時間：3 月 6 日上午 7 時 45 分至下午 16 時止。
報到地點：南山人壽教育訓練中心 B1 交誼廳辦理報到。

二、會員大會
3 月 6 日 11:20 至 12:00 於南山人壽教育訓練中心地下一樓 B101 階梯演講廳舉行，敬請會員踴躍參加。

三、理監事聯席會議
將於3月6日（星期六）下午17:15起，假南山人壽教育訓練中心211訓練教室進行第6屆第7次理監事聯席會議。

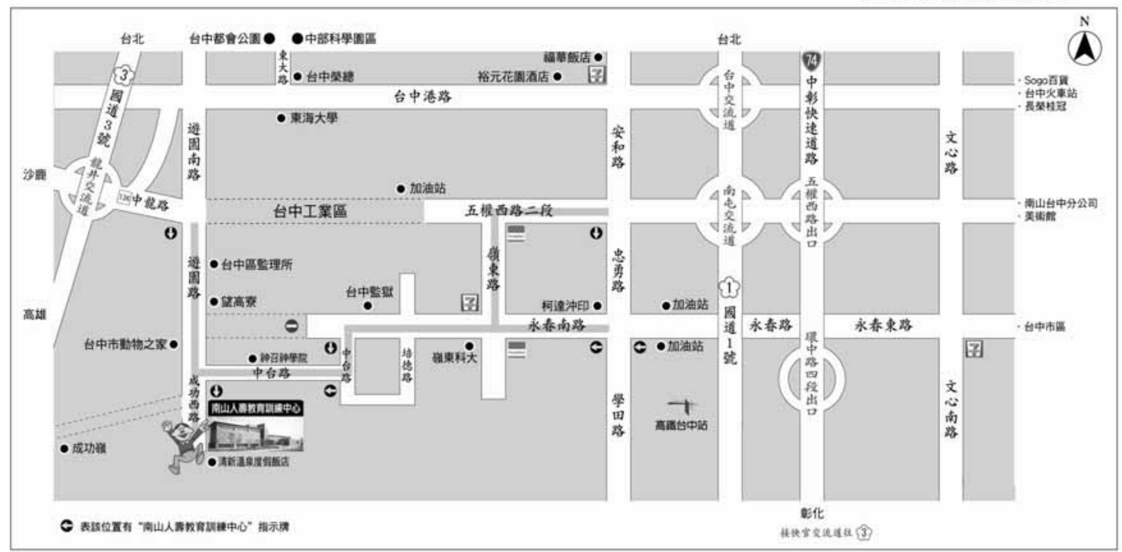
四、醫療商品展示
會議期間各參展廠商將於會場外交誼廳舉辦醫療商品展示，歡迎參觀。

五、午餐供應
敬請與會人員憑午餐券兌換盒餐便當，同時進行 Lunch Symposium。

六、停車資訊
南山人壽教育訓練中心停車場共有平面車位 167 個，請依告示牌之使用狀況，分別駛入地下二樓或地下三樓，採先到先停，滿位時請勿駛入。為方便貴賓，停車場採「管進不管出」方式停車，各車輛駕駛人應自負責其車輛及物品之安全，本場只供停車，不負保管責任。

交通示意圖

南山人壽教育訓練中心詳細地圖指引



說明：【標的】、『路名』、（方向）、<公里>

① 國道 1 號：

【南下/北上】：請下『181km 南屯交流道/台中、龍井』，（往右）龍井方向，<0.6km/1min>駛至【第二個紅綠燈】『嶺東路』（左轉），<1.8km/5min>直行至『永春南路』（右轉），<1.6km/3min>經【嶺東科大】，到【三角型安全島】（左轉），<0.1km>至（右轉）『中台路』，順著上坡路<1km>至坡頂分叉（左轉）「成功西路」<0.3km>抵達本中心。

③ 國道 3 號：

【南下】：請下『182km 龍井交流道/台中、龍井』，往台中方向，<1.5km/3min>行駛 136『中龍路』接『特三號道路』<1.6km/3min>到『遊園路二段』右轉，<5.4km/13min>『遊園路二段』直行到『遊園路一段』經【台中區監理所】，延山路行『中市 75 鄉道』駛到『中台路』再直行即可抵達本中心。

【北上】：請下『202km 快官交流道/台中、快官』，請（靠右）轉接『74 中彰快速道路』<6km/7min>往台中方向，經【烏日】、【高鐵】→再下『1.6km 環中路四段』出口，（左轉）<0.8km/2min>【環中陸橋下】到『永春路』口（左轉），『永春路』直走<1.2km/3min>行經【中山高涵洞】、【永春加油站】、（靠左直行），過『忠勇路』<2km/5min>接『永春南路』，經【嶺東科大】，【三角型安全島】（左轉）<0.1km>至（右轉）『中台路』，順著上坡路<1km>至坡頂分叉（左轉）「成功西路」<0.3km>抵達本中心。

74 中彰快速道路：

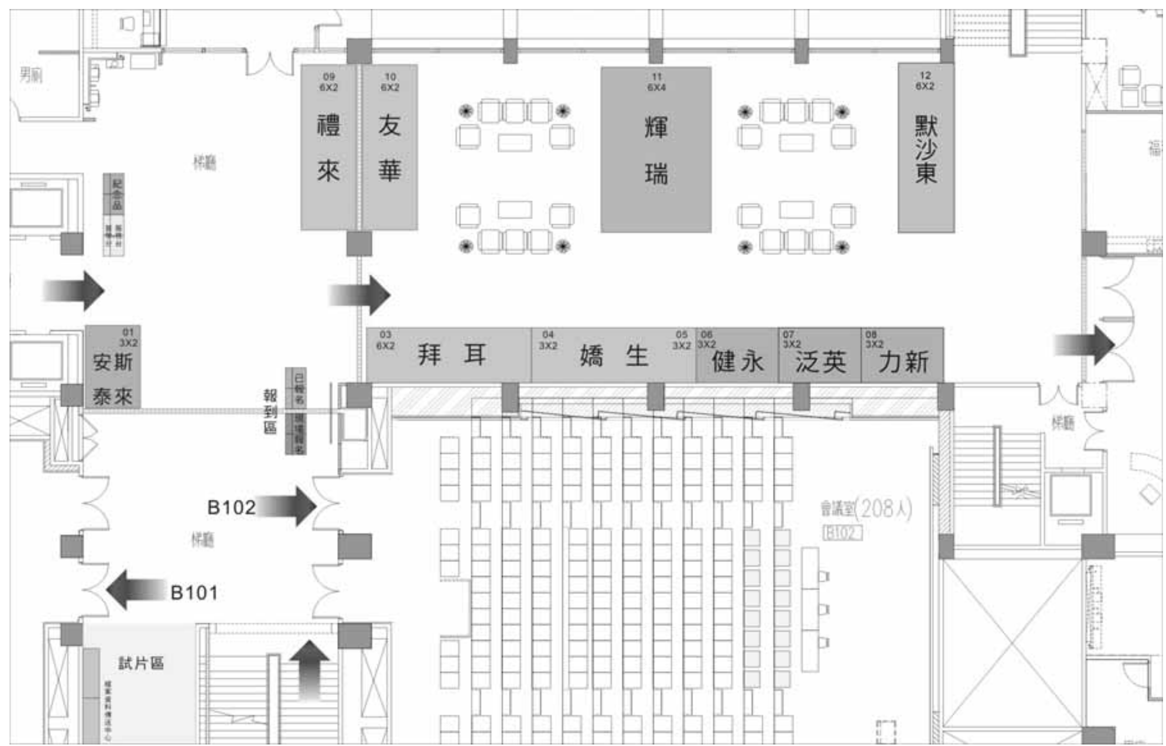
【南下】：請下『7km 五權西路』出口<1.2km/3min>直行到『永春路』（右轉），『永春路』直走<1.2km/3min>行經【中山高涵洞】、【永春加油站】、（靠左直行），過『忠勇路』<2km/5min>接『永春南路』，經【嶺東科大】，【三角型安全島】（左轉）<0.1km>至（右轉）『中台路』，順著上坡路<1km>至坡頂分叉（左轉）「成功西路」<0.3km>抵達本中心。

【北上】：請下『1.6km 環中路四段』出口，（左轉）<0.8km/2min>【環中陸橋下】到『永春路』口（左轉），『永春路』直走<1.2km/3min>行經【中山高涵洞】、【永春加油站】、（靠左直行），過『忠勇路』<2km/5min>接『永春南路』，經【嶺東科大】，【三角型安全島】（左轉）<0.1km>至（右轉）『中台路』，順著上坡路<1km>至坡頂分叉（左轉）「成功西路」<0.3km>抵達本中心。

【北上】：請下環中路四段出口，往永春路方向，紅綠燈左轉永春南路直走。

會場分佈圖

B1 平面圖



01 台灣安斯泰來製藥股份有限公司
03 台灣拜耳股份有限公司
04/05 嬌生股份有限公司楊森大藥廠
06 健永生技股份有限公司
07 泛英股份有限公司
08 力新國際文化事業股份有限公司
09 台灣禮來股份有限公司
10 友華生技醫藥股份有限公司
11 輝瑞大藥廠股份有限公司
12 美商默沙東藥廠股份有限公司台灣分公司

會議議程表

日期	時間	地點／樓層 B101 階梯演講廳	地點／樓層 B102 階梯演講廳
99/03/06 （星期六） 全天 南山人壽教育訓練中心 地下一樓	07:45～16:00	南山人壽教育訓練中心 B1 交誼廳辦理報到、繳費	
	08:00～09:20	一般論文演講（C1～C8） LUTS, Testosterone, ED	一般論文演講（E1～E8） Male Infertility and Others
	09:20～09:50	論文獎發表（B1～B2)	論文獎發表（B3～B4)
	09:50～10:10	Coffee Break	
	10:10～10:45	Special Lecture 1 Dr. Sae Chul Kim	一般論文演講（A1～A7） Prostate Cancer
	10:45～11:20	Special Lecture 2 Dr. Chris G McMahon	
	11:20～12:00	Annual Meeting	
	12:00～13:00	Lunch Symposium 張進寶醫師	
	13:00～14:00	一般論文演講（D1～D6） Erectile Dysfunction	一般論文演講（D7～D12） Erectile Dysfunction
	14:00～14:35	Special Lecture 3 Dr. Farid Saad	不孕症專題演講 蕭百忍教授
	14:35～15:10	特別演講 吳季如醫師	男性不孕症案例分析 男性不孕症研究小組
	15:10～15:25	Coffee Break	
	15:25～16:00	Special Lecture 4 Dr. Allen D Seftel	在忙碌的臨床服務中， 談臨床研究與高品質論文撰寫 吳晉祥醫師
	16:00～16:30	感染防治課程 王任賢醫師	
	16:30～17:00	醫學倫理課程 戴志展醫師	

第六屆理監事

理　事　長：王起杰
常務理事：孫光煥　黃志賢　劉詩彬　簡邦平
理　　　事：江漢聲　吳季如　吳建志　吳錫金　李祥生　林登龍　陳明村
黃一勝　黃世聰　楊緒棣
常務監事：張進寶
監　　　事：徐慧興　莊正鏗　張宏江　蔡德甫
顧　　　問：林信男　陳光國　謝汝敦
秘　書　長：劉家駒
財　務　長：李永進

大會暨學術演講會工作人員

理　事　長：王起杰
大會會長：吳錫金
大會副會長：張兆祥　張進寶
大會秘書長：陳國樑
學　術　組：簡邦平　吳錫金　林永明　林登龍　黃一勝　黃世聰　黃書彬
劉詩彬　楊緒棣
總　務　組：陳至正　林易霆　陳冠亨　石欣衛　林德祺
會　務　組：謝登富　余明瑩　連啟舜　謝博帆　廖兆秀　劉雅芳　蕭燕珍
陳俐璇
接　待　組：黃志平　林佳誼　王美惠　王玲欣　黃子庭
財　務　組：李永進
秘　書　組：劉家駒　何秀珠
秘　書　長：劉家駒
財　務　長：李永進

2010 年 榮譽會員簡介

王仁博醫師學經歷簡介................................

現職：1.健泰診所院長
2.彰化縣醫師公會理事
3.中華民國專門職業人員交流協會常務理事
4.台灣健康照護產業管理學會常務監事
5.大二林社區醫療群執行長
6.彰化縣防癌協會理事
7.台灣男性學醫學會會員

經歷：1.國防醫學院醫學系畢業
2.陸軍八〇二總醫院泌尿科主治醫師
3.健泰診所院長
4.彰化縣診所協會理事
5.財團法人中華杏林基金會董事
6.彰基社區醫學訓練計劃社區代訓機構臨床指導教師

其他：1.中華民國全國教育會常務監事
2.當選第二屆中華民國十大傑出專門職業人員
3.泌尿科專科醫師
4.外科專科醫師
5.家庭醫學科專科醫師

陳俊宏醫師學經歷簡介................................

現職：陳俊宏診所院長
經歷：1. 原省立台南醫院泌尿科主任
2. 台北長庚醫院進修
3. 台北榮民總醫院進修
4. 台大醫院皮膚科進修

著作：1. 中央信託局公保健康指導叢書-認識前列腺肥大症
2. 73年度：醫師醫學研究研究報告彙刊-台灣省衛生處編印

其他：1. 男性性功能失調特別演講-醫師公會主辦、四師聯誼會
2. 前列腺肥大症及前列腺炎-台南市政府主辦健康講座

會員大會程序

一、大會開始

二、全體肅立

三、主席就位

四、唱國歌

五、理事長致詞（包括來賓介紹）

六、來賓致詞

七、大會會長暨大會副會長致詞

八、大會會長及大會秘書長頒獎

九、男性學二大論文獎頒獎

十、榮譽會員頒獎

十一、理事會報告

十二、監事會報告

十三、討論事項

(A)請表決九十八年決算案。

(B)請表決九十九年預算案。

(C)請表決章程第二章第七條第三點第二項新修定案。

(D)請表決男性學二大論文獎甄選辦法第九項頒獎新修定案。

(E)請表決男性學住院醫師組論文獎甄選辦法。

十四、臨時動議

十五、散會

報告事項

一、理事會報告

(1)會務報告及計畫：

1. 98 年工作報告。
2. 99 年工作計劃。
3. 台灣 EDACT 委員會更名為台灣 SDACT 委員會緣由。
4. 台灣 SDACT 委員會 98 年工作報告。
5. 台灣 SDACT 委員會 99 年工作計劃。

(2)經費決算及預算案：

1. 98 年決算案。
2. 99 年預算案。

(3)會員概況：

1. 一般會員 294 名（含永久會員 43 名）。
2. 榮譽會員 18 名（含外賓 2 名）。
3. 團體會員 5 名。

二、監事會報告

(一) 關於大會執行工作經過，理事會均已分別報告，並視實際需要配合經費執行。

(二) 關於理事會處理會務均依本會章程辦理，遇有重要事項，則召開各委員會或理監事聯席會議商討解決。

(三) 本年理事會工作積極，值得向本會全體會員告慰。

台 灣 男 性 學 醫 學 會
九十八年工作報告
中華民國 98 年 1 月 1 日至 98 年 12 月 31 日止

一、會員大會

3月14日假羅東博愛醫院醫療大樓五樓國際會議中心舉辦本會98年度第6屆第2次會員大會。

二、學術演講

(1) 3 月 14 日假羅東博愛醫院醫療大樓五樓國際會議中心舉辦本會第 31 次學術演講會。
(2) 8月29日假高雄榮民總醫院舉辦本會第32次學術演講會。

三、理監事會議

(1) 3 月 13 日召開第 6 屆第 4 次理監事聯席會議。
(2) 7 月 11 日召開第 6 屆第 5 次理監事聯席會議。
(3)12月26日召開第6屆第6次理監事聯席會議。

四、繼續教育

(1) 3 月 11、12 及 15 日分北中南三區舉辦「Men's Health Symposium」。
(2) 3 月 13 日假國立傳統藝術中心 116 人多媒體教室舉辦「From Sexual Dysfunction to Men's Health」研討會。
(3) 4 月 11 日及 8 月 23 日假台北君悅酒店一樓會議室舉辦「RT Clinical Practice Update (1)(2)」研討會。
(4) 4 月 19 日和台灣生殖醫學會假台大醫院兒醫大樓 B1 舉辦「Male Infertility in the Era of Art」Joint Meeting。
(5) 9 月 27 日假台北榮民總醫院三樓外科部會議室舉辦「Azoospermia: Update Diagnosis and Treatment」研討會。
(6)台灣 SDACT 委員會舉辦之地方繼續教育課程。

五、出版

(1)大會手冊。
(2)研討會書籍。
(3)本會電子報會訊：
第 6 卷第 4 期、第 6 卷第 5 期、第 6 卷第 6 期、第 6 卷第 7 期。

六、網站：www.tand.org.tw

七、論文獎比賽

為促進會員之學術研究風氣，每年舉辦一次論文比賽，分基礎與臨床兩組（含住院醫師組）。其名次由本會學術暨教育委員會評定並決議頒發獎項或從缺。

八、男性學成就獎

為獎勵對國內男性學研究有貢獻之學者特頒此獎項以資鼓勵。

九、國際學術交流

Dr. Sirel Gurbuz Erdogan, Dr. Farid Saad and Dr Rosie King 應邀蒞臨本會舉辦之「98 年度第 6 屆第 2 次會員大會暨第 31 次學術演講會」及「From Sexual Dysfunction to Men's Health」研討會中作專題演講。

台 灣 男 性 學 醫 學 會

九十九年工作計劃

中華民國 99 年 1 月 1 日至 99 年 12 月 31 日止

一、會員大會

3 月 6 日假南山人壽教育訓練中心舉辦本會 99 年度第 6 屆第 3 次會員大會。

二、學術演講

(1) 3 月 6 日假南山人壽教育訓練中心舉辦本會第 33 次學術演講會。
(2) 8月份舉辦本會第34次學術演講會。

三、理監事會議

(1) 3 月份召開第 6 屆第 7 次理監事聯席會議。
(2) 7 月份日召開第 6 屆第 8 次理監事聯席會議。
(3)12月份召開第 6 屆第 9 次理監事聯席會議。

四、繼續教育

(1)3 月 5 日假南山人壽教育訓練中心舉辦「Highlights of 12th APSSM & Recent Advances in Sexual Medicine」研討會。
(2)9 月或 11 月份舉辦地方學術研討會。
(3)台灣 SDACT 委員會舉辦之地方繼續教育課程。

五、出版

(1)大會手冊。
(2)研討會書籍。
(3)本會電子報會訊：
第 6 卷第 8 期、第 6 卷第 9 期、第 6 卷第 10 期、第 6 卷第 11 期。

六、網站：www.tand.org.tw

七、論文獎比賽

為促進會員之學術研究風氣，每年舉辦一次論文比賽，分基礎與臨床兩組（含住院醫師組)。其名次由本會學術暨教育委員會評定並決議頒發獎項或從缺。

八、男性學成就獎

為獎勵對國內男性學研究有貢獻之學者特頒此獎項以資鼓勵。

九、國際學術交流

Dr. Sae Chul Kim, Dr. Chris G McMahon, Dr. Farid Saad and Dr. Allen D Seftel 等人應邀蒞臨本會舉辦之「99 年度第 6 屆第 3 次會員大會暨第 33 次學術演講會」及「Highlights of 12th APSSM & Recent Advances in Sexual Medicine」研討會中作專題演講。

台 灣 男 性 學 醫 學 會
台灣性功能障礙諮詢暨訓練委員會
九十八年工作報告
中華民國98年1月1日至98年12月31日止

一、委員會會議
(1) 5 月 2 日召開台灣 SDACT 第 5 屆第 2 次委員會會議。
(2) 11 月 28 日召開台灣 SDACT 第 5 屆第 3 次委員會會議。

二、繼續教育
全省不定期舉辦醫師訓練講座。

三、民眾教育
全省民眾巡迴衛教講座 10 場。

四、研究計劃
針對「男性性功能障礙」議題進行全國性大型線上調查。

五、出版
男性健康手冊。

六、網站
www.edact.org.tw

台 灣 男 性 學 醫 學 會

台灣性功能障礙諮詢暨訓練委員會
九十九年工作計畫
中華民國 99 年 1 月 1 日至 99 年 12 月 31 日止

一、委員會會議
(1) 4 月份召開台灣 SDACT 第 5 屆第 4 次委員會會議。
(2) 8 月份召開台灣 SDACT 第 5 屆第 5 次委員會會議。
(2) 12 月份召開台灣 SDACT 第 5 屆第 6 次委員會會議暨主任委員改選。

二、繼續教育
全省不定期舉辦醫師訓練講座。

三、民眾教育
全省民眾巡迴衛教講座 10 場。

四、研究計劃
針對「男性性功能障礙」線上調查結果擬定投稿計劃。

五、出版
男性健康手冊改版。

六、網站異動
www.tand.sdact.org.tw

台 灣 男 性 學 醫 學 會　組織章程

本章程於

中華民國九十一年三月三日第四屆第一次會員大會
通過增列第二章第七條第四項。
中華民國九十二年三月九日第四屆第二次會員大會
通過增列第二章第七條第五項；
通過修正第一章第一條、第二章第七條第三項、第三章第二十四條第二項、第五章第三十二條。
中華民國九十三年三月七日第四屆第三次會員大會
通過修正第二章第七條第三項。
中華民國九十五年三月四日第五屆第二次會員大會
通過修正第二章第七條第三項。

第一章　總則

第一條：本會名稱為【台灣男性學醫學會】(以下簡稱本會)。英文譯名【The Taiwanese Association of Andrology】，縮寫為【TAA】。

第二條：本會以促進男性學（包括關於攝護腺、儲精囊及外生殖器官之疾病、男性性功能障礙及不孕症等）醫學之研究與提昇教學及臨床醫療水準，增進國際交流為宗旨。

第三條：本會以全國行政區域為組織區域。

第四條：本會會址設於主管機關所在地區。

第五條：本會得於各省縣市設立分支機構，其組織簡則另定之。

第六條：本會之任務如下：

一、促進男性學醫學之研究與發展。
二、舉辦學術演講及討論會。
三、參加亞洲及國際男性學醫學之會議與活動。廣徵資訊並促進與各相關學術團體之交流。
四、出版有關男性學醫學之雜誌書刊。
五、甄選及制定男性學科專科醫師及制度。
六、協助會員醫療經驗之交流合作，男性學科醫師之培養訓練及繼續教育。
七、舉辦男性學之相關事項。

第二章　　　　會員

第七條：本會會員資格分下列五種：

一、個人會員：⑴凡贊同本會宗旨，並取得台灣泌尿科醫學會會員之資格。
⑵大專畢業從事有關男性學、生殖醫學研究並提出具體研究成果者。
⑶具有⑴或⑵資格者，由本會會員二人介紹，經理事會之審查通過並繳納會費後為個人會員。

二、贊助會員：凡贊同本會宗旨，年滿二十歲，對本會有所贊助，經理事會通過後聘任之。

原條文：

三、榮譽會員：⑴凡贊同本會宗旨，對男性學醫學有卓越貢獻，由本會理監事各一人之推薦，經理事會通過後聘任之；曾榮獲本會「男性學成就獎」殊榮之人士，得禮聘為本會榮譽會員。
⑵本會會員繳納會費滿十年以上，且年滿六十五歲以上者，得申請榮譽會員，經理事會通過後授予之。
前項會員名冊應報主管機關備查。

新條文：

三、榮譽會員：⑴凡贊同本會宗旨，對男性學醫學有卓越貢獻，由本會理監事各一人之推薦，經理事會通過後聘任之；曾榮獲本會「男性學成就獎」殊榮之人士，得禮聘為本會榮譽會員。
(2)本會會員繳納會費滿十年以上，且年滿七十歲以上者，得申請榮譽會員，經理事會通過後授予之。
前項會員名冊應報主管機關備查。

四、永久會員：⑴本會會員繳納會費滿三年者，得向本會提出永久會員之申請。
⑵願一次繳納十年份常年會費，得為永免納會費會員。

五、團體會員：凡贊同本會宗旨之醫療相關行業之機構或團體，得申請成為本會團體會員。

第八條：會員（會員代表）有違反法令、章程或不遵守會員（會員代表）大會決議時，得經理事會決議，予以警告或停權處份，其危害團體情節重大者，得經會員（會員代表）大會決議予以除名。如逾期二年不繳納會費者，停止其會員權利。逾期四年不繳納會費者，撤銷其會籍。

第九條：會員有下列情事之一者，為出會：
一、喪失會員資格者。
二、經會員（會員代表）大會決議除名者。

第十條：會員得以書面並敘明理由向本會聲明退會，但應於三個月前預告，並於會計年度結束時生效。

第十一條：會員經出會或退會，已繳納之各項費用不予退還。

第十二條：會員（會員代表）有表決權、選舉權、被選舉權與罷免權。每一會員為一權。但【贊助會員】、【榮譽會員】無表決權、選舉權、被選舉權與罷免權。

第十三條：會員有遵守本會章程、決議，接受指派職務及繳納會費之義務。

第三章 組織及職員

第十四條：本會以會員（會員代表）大會為最高權力機構，會員大會閉會期間由理事會代行職權，監事會為監察機構。如會員超過三百人以上時，得劃分地區，依會員人數比例選出代表，再合開代表大會，行使職權。

第十五條：會員（會員代表）大會之職權如下：
一、訂定與變更章程。
二、選舉或罷免理事、監事。
三、議決入會費、常年會費、事業費及會員捐款之數額及方法。
四、議決年度工作計劃、報告及預算、決算。
五、議決會員（會員代表）之除名處分。
六、議決財產之處分。
七、議決團體之解散。
八、與會員權利義務有關之其他重大事項之議決。

第十六條：本會置理事十五人、監事五人，由會員（會員代表）選舉之，分別成立理事會、監事會。其選舉辦法由理事會訂定，並報請主管機關核備後行之。
選舉前項理事、監事時，同時選出後補理事三人，後補監事一人。當選理監事及後補理監事之名次，依得票多寡為序、票數相同時以抽籤決定之。次屆理、監事候選人名單，得由會員（會員代表）授權當屆理事會辦理提名之。

第十七條：理事會職權如下：
一、議決會員（會員代表）大會之召開事項。
二、審定會員（會員代表）之資格。
三、選舉或罷免常務理事、理事長。
四、議決理事、常務理事或理事長之辭職。
五、聘免工作人員。
六、擬定年度工作計劃、報告及預算、決算。
七、其他應執行事項。

第十八條：理事會置常務理事五人，由理事互選之，並由理事就常務理事中選舉一人為理事長。
理事長對內綜理督導會務，對外代表本會，並擔任會員（會員代表）大會、理事會主席。
理事長應視會務需要到會辦公，其因事不能執行職務時，應指定常務理事一人代理之，不能指定時，由常務理事一人代理之。

第十九條：監事會之職權如下：
一、監察理事工作之執行。
二、審核年度決算。
三、選舉或罷免常務監事。
四、議決監事或常務監事之辭職。
五、其他應監查事項。

第二十條：監事會置常務監事一人，由監事互選之，監察日常會務，並擔任監事會召集人。

第二十一條：理事、監事之任期三年，連選得連任。但理事長不得連任。理事、監事之任期三年自召開本屆第一次理監事會聯席會議之日起計算。本會理監事如因故不能執行職務時，由候補理監事依次遞補之。

第二十二條：理事、監事均為無給職。

第二十三條：理事、監事有下列情事之一者，應即解任：
一、喪失會員（會員代表）資格者。

二、因故辭職經理事會或監理事會決議通過者。
三、被罷免或撤免者。
四、受停權處分期間逾期二分之一者。

第二十四條：一、本會置秘書長一人，承理事長之命處理本會事務，其他工作人員若干人，由理事長提名經理事會通過後聘免之，並報主管機關備查，但秘書長之解聘應先報主管機關核備。
二、本會卸任之理事長，如不再擔任理事者，得由學會聘任為顧問。

第二十五條：本會選任職員不得兼任工作人員。

第二十六條：本會得設各種委員會、小組，其組織簡則由理事會擬定，報經主管機關核備後施行，變更時亦同。

第四章　會議

第二十七條：會員（會員代表）大會，分定期會議與臨時會議二種，由理事長召集，召集時應於十五日前以書面通知之。定期會議每年召開一次，臨時會議於理事會認為必要或經會員（會員代表）五分之一以上之請求，或監事會函請召集時召開之。

第二十八條：會員（會員代表）不能親自出席會員（會員代表）大會時，以書面委託其他會員（會員代表）代理，每一會員（會員代表），以代理一人為限。

第二十九條：會員（會員代表）大會之決議，以會員（會員代表）過半數之出席，出席人數較多數之同意行之。但下列事項之決議以出席人數三分之二以上同意行之：
一、章程之訂定與變更。
二、會員（會員代表）之除名。
三、理事、監事之罷免。
四、財產之處分。
五、團體之解散。
六、其他與會員權利義務有關之重大事項。

第三十條：理監事聯席會議每六個月召開一次，必要時得召開臨時會議。
前項會議召開時除臨時會議外，應於 7 日前以書面通知，會議之決議，各以理事、監事過半數之出席，出席人數較多數之同意行之。

第三十一條：理事、監事應出席理監事聯席會議不得委託出席。
理事、監事連續二次無故缺席理、監事連席會議者，視同辭職。

第五章　經費及會計

第三十二條：本會經費來源如下：
一、入會費：個人會費新台幣 2,000 元，總住院醫師以下之個人入會費新台幣 1,000 元；團體會員會費新台幣 20 萬元。
二、常年會費：個人會費新台幣 1,000 元，總住院醫師以下之會員，免收第一年常年會費 NT$1000，第二年起常年會費半額優待；團體會員會費新台幣 10,000 元。
三、事業費。
四、會員捐款。
五、委託收金。
六、基金及其孳息。
七、其它收入。

第三十三條：本會會計年度自每年一月一日起至十二月三十一日止。

第三十四條：本會每年度編造預（決）算報告，於每年終了之前（後）二個月內，經理事會審查，提會員（會員代表）大會通過，並報主管機關核備，會員（會員代表）大會因故未能及時召開時，應經理、監事聯席會議通過，先報主管機關，事後提報大會追認，但決算報告應先送監事會審核，並將審核結果一併提會員（會員代表）大會。

第三十五條：本會於解散後，剩餘財產歸屬所在地之地方自治團體或主管機關指定之機關團體所有。應依法處理，不得以任何方式歸屬任何個人或私人企業機構。

第六章　附則

第三十六條：本章程如有未盡事宜，得提會員（會員代表）大會議決修正，呈主管機關備案。

第三十七條：本會辦事細則，由理監事聯席會議訂定之。

第三十八條：本章程經會員（會員代表）大會通過，報經主管機關核備後施行，變更時亦同。

台灣男性學醫學會　男性學二大論文獎
男性學論文獎、輝瑞論文獎甄選辦法

（本辦法經第二屆第七次理監事聯席會議通過並提報八十八年會員大會追認）
（本辦法經第三屆第七、九次理監事聯席會議通過並提報九十一年會員大會追認）
（本辦法經第四屆第四次理監事聯席會議通過並提報九十三年會員大會追認）
（本辦法經第六屆第五次理監事聯席會議通過並提報九十九年會員大會追認）

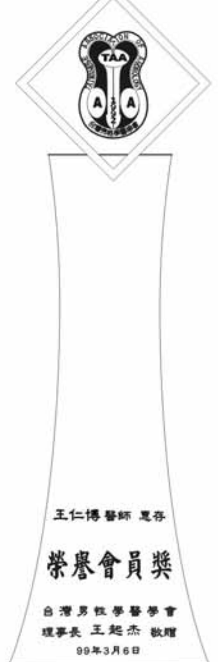
一、主　　旨：	為鼓勵本學會會員積極從事臨床醫療與基礎醫學之研究，特設「男性學論文獎」及「輝瑞論文獎」。
二、對　　象：	本學會會員已發表論文之第一作者，且其論文內容必須符合本學會男性學之定義。
三、論　　文：	自上年度10月起至本年度9月止，曾刊登有關男性學醫學論文於國內外具有審查作業的醫學雜誌；所提出之論文，限本國所做之研究，且須在國內未得其它任何獎項者，惟經論文評審委員會決議可從缺。
四、名　　額：	每年錄取名額四位；分臨床組及基礎組兩項各取二名。
五、申請方式：	1. 由會員推薦或會員自行提出申請臨床或基礎組別；但得獎項目及組別最後決定權在於論文評審委員會。 2. 每一位會員至多可投臨床或基礎論文各一篇參賽，且無論獲獎篇數多寡，均僅可選擇單一組別得獎，其選擇權在於論文評審委員會。
六、申請時間：	即日起至本年大會前三個月止(郵戳為憑)。
七、申請辦法：	請將該刊出論文抽印本或影本10份，於截止日前寄至本會(台北市吳興街600巷76弄61號四樓)，以利評審。擬參賽者，敬請檢附相關論文之SCI排名證明乙份。
八、審查方式：	由本學會教育委員會之各委員擔任評審委員，教育委員會之召集人即為評審委員會之召集人，負責評審有關事宜。得獎論文須獲三分之二（含）以上評審委員之審查通過。
九、頒　　獎：	於每年會員大會時，各頒予每名得獎人獎狀乙只及獎金（第一名新台幣參萬元整，第二名新台幣貳萬伍仟元整）。

台灣男性學醫學會　住院醫師組　男性學論文獎　甄選辦法

（本辦法經第六屆第五次理監事聯席會議通過並提報九十九年會員大會追認）

一、主　　旨：	為鼓勵住院醫師積極從事男性學相關臨床醫療與基礎醫學之研究，特設住院醫師組「男性學論文獎」。
二、對　　象：	住院醫師（含總醫師及研究醫師-Fellow）時期所發表的第一作者論文（原著或病例分析），且其論文內容必須符合本學會男性學之定義。
三、論　　文：	自上年度 10 月起至本年度 9 月止，曾刊登有關男性學醫學論文於國內外具有審查作業的醫學雜誌；所提出之論文，限於國內所做之研究，且須在國內未得其它任何獎項者。
四、名　　額：	每年錄取名額最多二名（可從缺）。
五、申請方式：	1.由會員推薦或自行提出申請。 2.每一位至多可投一篇參賽。
六、申請時間：	每年十月一日至三十一日止（郵戳為憑）。
七、申請辦法：	請將該刊出論文抽印本或影本10份，於截止日前寄至本會（台北市吳興街600巷76弄61號四樓），以利評審。擬參賽者，敬請檢附相關論文之SCI排名證明乙份。
八、審查方式：	由本學會教育委員會之各委員擔任評審委員，教育委員會之召集人即為評審委員會之召集人，負責評審有關事宜。得獎論文須獲三分之二（含）以上評審委員之審查通過。
九、申請資格：	申請者需具男性學醫學會會員資格（或於提出申請時，同時申請加入男性學醫學會會員）。
十、頒　　獎：	於每年會員大會時，各頒予每名得獎人獎狀及獎金。 獎金：第一名：新台幣壹萬元整。 　　　第二名：新台幣五仟元整。

感謝狀及其他獎狀



台灣男性學醫學會
第六屆大會會長
吳錫金醫師 惠存

貢獻殊偉

台灣男性學醫學會
理事長 王起杰 敬贈

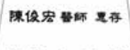
純金999　99年3月6日

台灣男性學醫學會
第六屆大會秘書長
陳國樑醫師 惠存

才德咸欽

台灣男性學醫學會
理事長 王起杰 敬贈

純金999　99年3月6日



陳俊宏醫師 惠存
榮譽會員獎
台灣男性學醫學會
理事長 王起杰 敬贈
99年3月6日

感謝
王任賢醫師
蒞臨本學會專題演講紀念

言論精闢

台灣男性學醫學會
理事長 王起杰 敬贈
純金999　99年3月6日

感謝
戴志展醫師
蒞臨本學會專題演講紀念

言論精闢

台灣男性學醫學會
理事長 王起杰 敬贈
純金999　99年3月6日

感謝
蕭百忍教授
蒞臨本學會專題演講紀念

言論精闢

台灣男性學醫學會
理事長 王起杰 敬贈
純金999　99年3月6日

感謝
吳晉祥醫師
蒞臨本學會專題演講紀念

言論精闢

台灣男性學醫學會
理事長 王起杰 敬贈
純金999　99年3月6日

感謝狀及其他獎狀

內政部長江宜樺於98年11月6日頒發【97年度優等團體】獎狀由理事長王起杰授獎

本學會於民國98年11月6日獲頒「97年度全國性優等社團」，在全國約九仟個社團中，我們榮獲第九名，這要歸功於秘書長的全力協助、理監事們的積極參與並提出寶貴的意見，以及各委員會的全力配合。

感謝狀及其他獎狀

台內社字第0980183645號

台灣男性學醫學會

積極推展團體會務及業務經97年
度全國性社會團體工作評鑑績效
卓著名列優等特頒此狀用資獎勵

部長 江宜樺

中華民國98年11月6日

感謝狀及其他獎狀

台灣男性學醫學會
男性學論文獎臨床組
查會員　簡　邦　平　參加
九十九年度論文甄選經評審
小組評定以貴論著理論精宏
文采斐然至堪嘉許　特
頒獎鼓勵
論著題目：Sexual Dysfunction in Men who Abuse Illicit Drugs: A Preliminary Report
理事長　王起杰
中華民國九十九年三月六日

台灣男性學醫學會
男性學論文獎基礎組
查會員　郭　育　成　參加
九十九年度論文甄選經評審
小組評定以貴論著理論精宏
文采斐然至堪嘉許　特
頒獎鼓勵
論著題目：The Role of Chloride Channels in Rat Corpus Cavernosum: In Vivo Study
理事長　王起杰
中華民國九十九年三月六日

台灣男性學醫學會
輝瑞論文獎臨床組
查會員　李　永　進　參加
九十九年度論文甄選經評審
小組評定以貴論著理論精宏
文采斐然至堪嘉許　特
頒獎鼓勵
論著題目：The Associations among GNB3 C825T Polymorphism, Erectile Dysfunction, and Related Risk Factors
理事長　王起杰
中華民國九十九年三月六日

台灣男性學醫學會
輝瑞論文獎基礎組
查會員　崔　克　宏　參加
九十九年度論文甄選經評審
小組評定以貴論著理論精宏
文采斐然至堪嘉許　特
頒獎鼓勵
論著題目：Curcumin Blocks the Activation of Androgen and Interleukin-6 on Prostate-Specific Antigen Expression in Human Prostatic Carcinoma Cells
理事長　王起杰
中華民國九十九年三月六日

The Taiwanese Association of Andrology
Presented to Dr. Sae Chul Kim
in appreciation for your spectacular lecture at the
general scientific meeting in Taichung, Taiwan, March 6, 2010

President　Chii-Jye Wang, MD., Ph.D.

The Taiwanese Association of Andrology
Presented to Dr. Farid Saad
in appreciation for your spectacular lecture at the
general scientific meeting in Taichung, Taiwan, March 6, 2010

President　Chii-Jye Wang, MD., Ph.D.

The Taiwanese Association of Andrology
Presented to Dr. Chris G McMahon
in appreciation for your spectacular lecture at the
general scientific meeting in Taichung, Taiwan, March 6, 2010

President　Chii-Jye Wang, MD., Ph.D.

The Taiwanese Association of Andrology
Presented to Dr. Allen D Seftel
in appreciation for your spectacular lecture at the
general scientific meeting in Taichung, Taiwan, March 6, 2010

President　Chii-Jye Wang, MD., Ph.D.

三月六日（星期六）
南山人壽教育訓練中心地下一樓 B101 階梯演講廳
【外賓演講】

座長： 吳錫金醫師

時間	講題／主講人
10:10-10:45 S1	Beyond 1st Decade of Sildenafil: From Evidence to Experience Dr. Sae Chul Kim Department of Urology Chung-Ang University Hospital, Seoul, Korea

座長： 陳光國醫師

時間	講題／主講人
10:45-11:20 S2	Dapoxetine: Breakthrough Science in Premature Ejaculation Treatment Dr. Chris G McMahon Australian Centre for Sexual Health, Sydney Australia

座長：簡邦平醫師

時間	講題／主講人
14:00-14:35 S3	Testosterone and Obesity – The Role of Testosterone in Visceral Fat Accumulation Dr. Farid Saad Bayer Schering Pharma, Scientific Affairs Men's Healthcare; Gulf Medical University, Research Department, Ajman, UAE; Hang Tuah University, Men's Health Reproduction Study Center, Surabaya, Indonesia

三月六日（星期六）
南山人壽教育訓練中心地下一樓 B101 階梯演講廳
【外賓演講】

座長：黃一勝醫師

時間	講題／主講人
15:25-16:00 S4	The Clinical Practice of Testosterone Replacement Therapy Dr. Allen D Seftel, MD Head, Division of Urology, Cooper University Hospital, Camden, NJ Professor of Urology, Robert Wood Johnson SOM

三月六日（星期六）
南山人壽教育訓練中心地下一樓 B101 階梯演講廳
【**LUNCH SYMPOSIUM** & 特別演講】

座長： 李祥生醫師

時間	講題／主講人
12:00-13:10	Prevalence and Clinical Experience of Premature Ejaculation (PE) in Taiwan 主講人：張進寶醫師 彰化基督教醫院泌尿外科主任

座長：王起杰醫師

時間	講題／主講人
14:35-15:10	The Efficacy and Safety of Once Daily Tadalafil on Erectile Function and Lower Urinary Tract Symptoms (LUTS) in Men with Erectile Dysfunction (ED) and Benign Prostatic Hyperplasia (BPH) Chi Ju Wu, MD FICS Su Tan Urology Clinic

三月六日（星期六）
南山人壽教育訓練中心地下一樓 B102 階梯演講廳
【不孕症專題演講】

座長：黃志賢醫師

時間	內容/主講人
14:00-14:35	The Genetics of Male Infertility Professor Pauline Yen Institute of Biomedical Sciences, Academia Sinica, Taipei

座長：林永明醫師

時間	內容/主講人
14:35-15:10	男性不孕症案例分析 男性不孕症研究小組
15:25-16:00	在忙碌的臨床服務中，談臨床研究與高品質論文撰寫 主講人：吳晉祥 醫師 國立成功大學醫學院家庭醫學科/附設醫院家庭醫學部

三月六日（星期六）
南山人壽教育訓練中心地下一樓 B101 階梯演講廳
【感染防治課程】&【醫學倫理課程】

【感染防治課程】

座長：張兆祥醫師

時間	內容/主講人
16:00-16:30	性病與愛滋病 主講人：王任賢醫師 中國醫藥大學附設醫院院內感控小組主任 行政院衛生署疾病管制局中區傳染病防治醫療網指揮官

【醫學倫理課程】

座長：徐慧興醫師

時間	內容/主講人
16:30-17:00	醫院組織倫理 主講人：戴志展醫師 中國醫藥大學醫務管理研究所/醫學系副教授 中國醫藥大學附設醫院一般耳鼻喉科主任

三月六日（星期六）
南山人壽教育訓練中心地下一樓 B102 階梯演講廳
【一般論文發表】

座長：黃俊雄醫師、張宏江醫師

時間	內容
10:10-10:20 A1	Prognostic Significance of Prostate Cancer Susceptibility Variants on Prostate-Specific Antigen Recurrence after Radical Prostatectomy 攝護腺癌基因易感性變異對根除性攝護腺切除術後攝護腺特異抗原復發的預後角色 黃書彬[1,2,3] 黃莉佳[4] 丁文謙[5] 陳璐敏[4] 張大元[6] 陸德齡[7] 藍于琁[7] 劉家駒[1] 楊文惠[8] 李鳳琴[7] 謝其政[9,10] 鮑柏穎[7] 高雄醫學大學附設中和紀念醫院泌尿科 [1] 高雄市立小港醫院泌尿科 [2] 高雄醫學大學醫學系泌尿科 [3] 中國醫藥大學附設醫院婦產部 [4] 大腸直腸外科 [5] 中國醫藥大學 職業安全與衛生學系 [6] 藥學系 [7] 醫務管理學系 [8] 亞東技術學院醫務管理學系 [9] 台灣大學醫療機構管理研究所 [10]
10:20-10:30 A2	Association Analysis of the WNT Pathway Genes on Prostate Specific Antigen Recurrence after Radical Prostatectomy WNT路徑基因多型性與攝護腺癌術後攝護腺特異抗原復發之相關性 黃書彬[1,2,3] 丁文謙[4] 陳璐敏[5] 黃莉佳[5] 劉家駒[1] 陳建偉[6] 謝其政[7,8] 楊文惠[9] 張大元[10] 李鳳琴[11] 鮑柏穎*[11] 高雄醫學大學附設中和紀念醫院泌尿科 [1] 高雄市立小港醫院泌尿科 [2] 高雄醫學大學醫學系泌尿科 [3] 中國醫藥大學附設醫院 大腸直腸外科 [4] 婦產部 [5] 諾華製藥公司臨床研究發展部 [6] 台灣大學醫療機構管理研究所 [7] 醫務管理學系 [8] 中國醫藥大學 醫務管理學系 [9] 職業安全與衛生學系 [10] 藥學系*[11]
10:30-10:40 A3	Prostate Specific Antigen as a Prognostic Factor for Biochemical Progression of Advanced Prostate Cancer Patients Receiving Hormone Treatment 以攝護腺特定抗原做為侵犯性攝護腺癌患者接受荷爾蒙療法後發生生化惡化的預後因子之研究 陳建華 [1,2,3] 張宏江 [4] 謝德生 [3] 林志明 [3] 程蘊菁 [2] 簡國龍 [2] [1] 新竹國泰綜合醫院外科部泌尿外科 [2] 國立臺灣大學公共衛生學院預防醫學研究所 [3] 國泰綜合醫院外科部泌尿外科 [4] 國立臺灣大學醫學院附設醫院泌尿部
10:40-10:50 A4	Experience of First 100 Cases of Robotic-Assisted Radical Prostatectomy (RALP) by A Single Surgeon in Taiwan 單一醫師施行機器手臂攝護腺根除術 100 例之經驗 歐宴泉 程千里 楊啟瑞 台中榮民總醫院 外科部 泌尿外科 攝護腺防治中心
10:50-11:00 A5	Complication of 200 Cases of Robotic-Assisted Radical Prostatectomy (RALP) by A Single Surgeon in Taiwan 單一醫師施行機器手臂攝護腺根除術 200 例併發症之探討 歐宴泉 程千里 楊啟瑞 台中榮民總醫院 外科部 泌尿外科 攝護腺防治中心
11:00-11:10 A6*	Prostatic Involvement by Urothelial Carcinoma in Radical Cystoprostatectomy for Bladder Cancer: VGHTPE Experience in 10 years 膀胱癌經根除性膀胱攝護腺切除手術尿路上皮腫瘤對攝護腺之侵犯－台北榮總十年之經驗分析 張鐸 郭俊逸 林登龍 陳光國 台北榮民總醫院外科部泌尿科 國立陽明大學醫學院泌尿學科
11:10-11:20 A7*	Prostate Metastasis from Gastric Adenocarcinoma Following Subtotal Gastrectomy: A Case Report and Literature Review 罕見胃癌術後發生攝護腺轉移之個案報告與文獻回故 黃琮懿 [1] 劉家駒 [1,2] 莊捷翰 [3] 黃書彬 [1,2] 李永進 [1] 沈榮宗 [2] 張美玉 [2] 高雄醫學大學附設醫院泌尿科 [1] 高雄市立小港醫院（委託財團法人高雄醫學大學經營）泌尿科 [2] 高雄醫學大學附設醫院外科部胃腸外科 [3]

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【論文獎發表】

座長：王起杰醫師

時間	內容
09:20-09:35 B1	男性學論文獎 – 臨床組 Sexual Dysfunction in Men who Abuse Illicit Drugs: A Preliminary Report 發表人：簡邦平醫師
09:35-09:50 B2	輝瑞論文獎 – 臨床組 The Associations among GNB3 C825T Polymorphism, Erectile Dysfunction, and Related Risk Factors 發表人：李永進醫師

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座長：謝汝敦醫師

時間	內容
09:20-09:35 B3	男性學論文獎 – 基礎組 The Role of Chloride Channels in Rat Corpus Cavernosum: In Vivo Study 發表人：郭育成醫師
09:35-09:50 B4	輝瑞論文獎 – 基礎組 Curcumin Blocks the Activation of Androgen and Interlukin-6 on Prostate-Specific Antigen Expression in Human Prostatic Carcinoma Cells 發表人：崔克宏醫師

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【一般論文發表】

座長：吳建志醫師、蔡德甫醫師

時間	內容
08:00-08:10 C1*	Young Men Lower Urinary Tract Symptoms 年輕男性的下泌尿道症狀 黃鈺文 林登龍 陳光國 台北榮民總醫院外科部泌尿外科 國立陽明大學醫學院泌尿學科
08:10-08:20 C2*	Correlation of Lower Urinary Tract Symptoms and Serum Testosterone Levels in Men Receiving Health Check Up and Aged 30 and Above 三十歲以上接受體檢的男性其下泌尿道症狀及血清中睪固酮之間的相關性 翁文慶 劉詩彬 謝汝敦 余宏政 台大醫院泌尿部
08:20-08:30 C3	Serum Dihydrotestosterone Level had Significant Correlation with Total Prostate Volume 血清中的 Dihydrotestosterone 濃度和攝護腺體積有顯著相關性 廖俊厚[1] 鍾旭東[2] 江漢聲[1] 余宏政[3] 耕莘醫院泌尿科 輔仁大學[1] 亞東醫院泌尿科[2] 台大醫院泌尿部[3]
08:30-08:40 C4	Relationships between Serum Levels of Endogenous Testosterone and Sex-Hormone Binding Globulin with Lipid Profiles in Aging Males 中老年男性內源性睪固酮與性荷爾蒙結合球蛋白血清濃度跟脂肪成份關係 吳錫金[1] 謝汝敦[2] 劉詩彬[2] 簡邦平[3] 中國醫藥大學附屬醫院泌尿外科[1] 台灣大學附屬醫院泌尿外科[2] 高雄榮民總醫院泌尿外科[3]
08:40-08:50 C5	Sexuality and Management of Benign Prostatic Hyperplasia with Alfuzosin 以 Alfuzosin 治療良性攝護腺肥大對性功能的影響 黃一勝[1] 江博暉[2] 林茂盛[3] 陳志碩[4] 李良明[5] [1]新光醫院外科部泌尿科 [2]高雄長庚醫院 [3]秀傳醫院 [4]嘉義長庚醫院 [5]萬芳醫院
08:50-09:00 C6	The Early Effect of Diabetes and Metabolic Syndrome on Lower Urinary Tract Dysfunction and Erectile Dysfunction 糖尿病和代謝症候群對於下泌尿道功能和勃起功能障礙的初期影響 王炯珵 余宏政 恩主公醫院泌尿科 國立臺灣大學醫學院泌尿科
09:00-09:10 C7	The Associations among *eNOS* G894T Gene Polymorphism, Erectile Dysfunction, and Benign Prostate Hyperplasia-Related Lower Urinary Tract Symptoms *eNOS* G894T 基因多型性與勃起功能障礙及前列腺肥大引起之下泌尿症狀之間的相關性 李永進[1] 黃書彬[1,2] 劉家駒[1,2] 吳文正[1] 王起杰[1] 柯宏龍[1] 李威明[1] 葉信志[1] 李經家[1] 周以和[1] 黃俊雄[1] 高雄醫學大學附設醫院泌尿科[1] 高雄市立小港醫院泌尿科[2]
09:10-09:20 C8	Inlay Buccal Mucosal Graft: A Novel Technique for Re-operative Posterior Urethroplasty 嵌入式口腔黏膜皮瓣：一種全新針對再手術之後尿道整型技術 唐守宏 高建璋 吳勝堂 莊豐賓 孫光煥 于大雄 查岱龍 國防醫學院 三軍總醫院 外科部 泌尿外科

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【一般論文發表】

座長：陳明村醫師、黃世聰醫師

時間	內容
13:00-13:10 D1	A Brief Overview of Recent Advances in Human Penile Anatomy and Erection Physiology 簡要概述人類陰莖解剖學與勃起生理學的最近進展 許耕榕 中國醫藥大學暨附設醫院泌尿科 顯微手術性功能重建暨研究中心
13:10-13:20 D2	Penile Veins are the Determining Contributor for Erection: The Hemodynamic Evidence from the Study in Defrosted Human Cadavers 陰莖靜脈是勃起功能的決定因素：研究解凍大體所獲血流動力學上的證據 許耕榕[1] 謝政興[2] 黃怡萍[3] 蔡孟宏[4] 陳國樑[1]張兆祥[1] 吳錫金[1] 中國醫藥大學暨附設醫院泌尿科 顯微手術性功能重建暨研究中心[1] 生理學科[3] 解剖學科[4] 佛教慈濟綜合醫院台北分院泌尿科[2]
13:20-13:30 D3	A Physiological Approach to a Penile Venous Stripping Surgical Procedure for Patients with Erectile Dysfunction 由生理學觀點著手執行陰莖靜脈截除手術治療勃起功能障礙病患 謝政興[1] 許耕榕[2] 黃怡萍[3] 陳國樑[2] 張兆祥[2] 中國醫藥大學暨附設醫院泌尿科 顯微手術性功能重建暨研究中心[2] 生理學科[3] 佛教慈濟綜合醫院台北分院泌尿科[1]
13:30-13:40 D4	Clinical Experience of a Refined Penile Venous Stripping Surgery Procedure for Patients with Erectile Dysfunction: Is It a Viable Option? 精確的陰莖靜脈截除手術治療勃起功能障礙病患的臨床經驗：手術是否為可行的治療選項？ 謝政興[1] 許耕榕[2] 陳恆順[3] 李文源[2] 陳國樑[2] 張兆祥[2] 中國醫藥大學暨附設醫院泌尿科 顯微手術性功能重建暨研究中心[2] 國立台灣大學醫學院暨附設醫院醫學資訊學系[3] 佛教慈濟綜合醫院台北分院泌尿科[1]
13:40-13:50 D5	The Effect of Intracavernous Adipose Derived Stem Cells Injection on Hyperlipidemia-associated Erectile Dysfunction in a Rat Model System 脂肪幹細胞對高血脂老鼠併發性功能障礙的治療效果 黃雲慶[1] 陳志碩[1] 吳靖方[1] 許家禎[1] 林威宇[1] 何東儒[1] 陳孟欣[1] 呂福泰[2] 財團法人嘉義長庚紀念醫院外科部泌尿外科[1] 加州大學舊金山分校泌尿部[2]
13:50-14:00 D6	The Changes of Systemic Oxidative Stress and Penile Transforming Growth Factor beta in Rabbits with Chronic Partial Bladder Outlet Obstruction 慢性膀胱阻塞對全身性氧化壓力及陰莖 TGF-beta 的影響 林威宇 林依蓓 陳孟欣 黃雲慶 何東儒 許家禎 吳靖方 陳志碩 長庚紀念醫院嘉義分院外科部泌尿科

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座長：吳季如醫師、張進寶醫師

時間	內容
13:00-13:10 D7	Comparison of the Intracavernous Pressure Increase between Unilateral and Simultaneous Bilateral Electrical Stimulation of Cavernous Nerve in the Rat 單側及雙側電刺激海綿體神經引起大白鼠海綿體內壓增加之比較 陳光國 張心湜 台北榮民總醫院外科部泌尿外科 國立陽明大學書田泌尿科學研究中心
13:10-13:20 D8	How ED Couples Face Pleasant and Unpleasant Sexual Experiences 勃起功能障礙之性伴侶面對愉悅和不愉悅性經驗時之溝通模式 陳煜 盧致誠[1] 簡邦平[2] 黃世聰 黃信介 許毓昭 張博誌 謝明里 林口長庚紀念醫院外科部泌尿科 奇美醫院泌尿科 高雄榮民總醫院泌尿科[2]
13:20-13:30 D9	Couple Satisfaction with the Oral Pharmacotherapy for Erectile Dysfunction 口服藥治療勃起功能障礙伴侶滿意度 黃世聰[1] 簡邦平[2] 林口長庚紀念醫院泌尿科[1] 高雄榮民總醫院泌尿外科[2]
13:30-13:40 D10	Risk Factors for Individual Domains of Female Sexual Dysfunction 女性性功能障礙個別分項的危險因子分析 簡邦平 高雄榮民總醫院泌尿外科
13:40-13:50 D11	Erectile and Ejaculatory Dysfunction in Amphetamine Abusers 男性濫用安非他命引起勃起與射精功能障礙 簡邦平 高雄榮民總醫院泌尿外科
13:50-14:00 D12	The Impact of Physical Health and Socioeconomic Factors on Sexual Activity in Middle-aged and Elderly Taiwanese Men 健康狀態與社經因素對台灣中老年男性性生活之影響 劉家駒[1,2] 黃書彬[1,2] 阮序承[1] 李永進[1] 吳文正[1] 王起杰[1] 柯宏龍[1] 李威明[1] 葉信志[1] 李經家[1] 周以和[1] 黃俊雄[1] 高雄醫學大學附設醫院泌尿科[1] 高雄市立小港醫院（委託財團法人高雄醫學大學經營）泌尿科[2]

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座長：孫光煥醫師、黃志賢醫師

時間	內容
08:00-08:10 E1	Abnormality in Spermatogenesis in Hyperprolactinemic Rats is Related to Hyper-function of Type 2 TNF α Receptors on the Sertoli and Developing Germ Cells 雄鼠高泌乳素血症誘發之造精功能異常可能是因為第二型腫瘤壞死因子 α 受體之功能增強有關 黃志賢 蔡宜庭 浦筱峰 王錫崗 張心湜 國立陽明大學醫學院泌尿學科及生理學科 台北榮民總醫院外科部泌尿外科
08:10-08:20 E2	Hyperprolactinemia-induced Hypogonadism Can be Reversed by Administrating Anti-TNF α Antibody to the Testis in Male Rats 雄鼠高泌乳素血症誘發之睪丸功能低下可以睪丸內給予抗腫瘤壞死因子 α 抗體而矯正之 黃志賢 蔡宜庭 浦筱峰 王錫崗 張心湜 國立陽明大學醫學院泌尿學科及生理學科 台北榮民總醫院外科部泌尿外科
08:20-08:30 E3	The Phenotype Analysis of Infertile Men with Y Chromosome Microdeletions 有 Y 染色體微缺損之不孕男性的表現型分析 黃志賢 陳光國 林登龍 張心湜 國立陽明大學醫學院醫學系泌尿學科 台北榮民總醫院外科部泌尿外科
08:30-08:40 E4	FGF9 Acts as a Local Regulator of Testicular Function 纖維母細胞生長因子9為一種睪丸功能之調控因子 林永明 林宗彥 鍾佳玲 林信男 楊文宏 國立成功大學醫學院泌尿科
08:40-08:50 E5*	FGF9 Promoter Variant -712T is Associated with Susceptibility to Sertoli Cell-only Syndrome 纖維母細胞生長因子9之起動子變異-712T與賽托利細胞症候群之發生有關 林宗彥 林永明 鍾佳玲 林信男 楊文宏 國立成功大學醫學院泌尿科
08:50-09:00 E6	A Novel Device for Testing Motile Sperm at Home - A Wallet-sized Prototype and Its Correlation with Traditional Sperm Tests 能在家中測量活動精子數的新式儀器－只有皮夾般大小的原型機介紹以及其測量結果與傳統測量方法結果的相關性 蔡芳生 [123] 謝汝敦 [2] 張宏江 [2] 陳佑安 [4] 黃子瑋 [4] 陳昌佑 [4] 林建明 [4] 黃繼德 [4] 胡文聰 [4] 天成醫院 [1] 台大醫院泌尿部 [2] 台大醫工所 [3] 台大應力所 [4]
09:00-09:10 E7	Seminal Vesicle MRI as the Best Image Diagnosis for the Congenital Absence of Vas Deferense 貯精囊核磁共振是先天無輸精管病人最好的影像診斷 江漢聲 [1,2] 吳宜娜 [1] 吳建志 [2] 劉家宏 [3] 林逸襄 [4] 輔大醫學院[1] 台北醫學大學附設醫院泌尿科[2] 行政院衛生署雙和醫院泌尿科[3] 台北醫學大學附設醫院放射科[4]
09:10-09:20 E8*	Carcinosarcoma of Scrotum: A Case Report and Literature Review 陰囊癌肉瘤：個案報告及文獻回顧 張鐸 林子平 林登龍 陳光國 台北榮民總醫院外科部泌尿科 國立陽明大學醫學院泌尿學科

S1
Beyond 1st Decade of Sildenafil: From Evidence to Experience

Dr. Sae Chul Kim
Department of Urology Chung-Ang University Hospital, Seoul, Korea

Introduction, 10 years ago, of the first safe, effective medication (sildenafil) for ED increased the number of particularly elderly patients seeking for ED treatment and acknowledgment for ED treatment by physicians, patients, and patients' spouses, and revolutionized healthcare delivery, with sexual dysfunction now entering the realm of not only the specialist, but also the general practitioner.

Sildenafil use at initial efficacy studies was associated with an improved ability to achieve erection in 68% of patients with ED seen at a urology practice, and 75% of patients at a multispecialty clinic achieved successful intercourse with sildenafil at every attempt. The loss or absence of efficacy was an important concern in long-term users. However, satisfaction with treatment effect on erections and improved ability to engage in sexual activity was consistently reported by 95% patients using sildenafil at each yearly assessment for 3 years. The long-term users of sildenafil for more than 5 years felt that improved rigidity after first sildenafil use was maintained. They ranked the prominence of rigidity of erection as the major reason of long-term use, followed by becoming more intimate with spouse, becoming full of confidence, and having sex more frequently.

Because sexual activity is associated with a small increase in the risk of acute myocardial infarction and death, there were serious concerns among physicians and patients when sildenafil was first launched. However, 5 years after the launch, one of the main changes concerning perceptions of sildenafil in Korea is that reservations about drug's safety by physicians, patients, and their spouses have decreased. Considerable number of the long-term users for more than 5 years had AEs of facial flushing (21%) and eye congestion (9%), but they were not a factor for discontinuation, while AEs or fear of possible AEs were reasons of discontinuation of treatment with a short-term use.

Since introduction of sildenafil we have two more PDE5 inhibitors, vardenafil and tadalafil competitive with sildenafil in global markets and a few PDE5 inhibitors

available in local markets, which have a pharmacokinetic profile similar ("short lasting") to or quite different ("long lasting") from sildenafil. Pharmacodynamic difference may suggest a varying efficacy on different sexual parameters (number of sexual acts per pill, hardness, satisfaction, switching from one medication to another, patient's preference, couple's quality of life, etc). However, all studies comparing the three drugs are seriously biased by manufacturer sponsorship. In a recent (2009) spontaneous, open-label, randomized, multicenter, crossover study in Italy where the patients were randomized to receive sildenafil 50 mg, sildenafil 100mg, tadalafil 20 mg, or vardenafil 20 mg, the 3 PDE5 inhibitors in the perception of treatment benefits were not different but sildenafil, in a dose-dependent manner, was the unique PDE5 inhibitor able to ameliorate some of the penile flow parameters (peak systolic velocity, resistive index) within the 8-week treatment period.

S2
Dapoxetine: Breakthrough Science in Premature Ejaculation Treatment

Chris G McMahon,
Australian Centre for Sexual Health,
Sydney Australia

Dapoxetine is a rapid acting, short-life SSRI that has received regulatory approval as an on-demand treatment for PE in Korea, Europe, and in several other parts of the world. In phase 3 clinical trials, of over 6000 men, dapoxetine 30 mg or 60 mg taken 1-2 hr before intercourse is more effective than placebo, resulting in a 2.5 and 3.0 fold increase in IELT, increased ejaculatory control, decreased distress, and increased satisfaction. Dapoxetine is generally well tolerated and the most common adverse effects included nausea, dizziness, and headache. Dapoxetine is not associated with SSRI withdrawal syndrome, suicidal ideation, anxiety or akathisia and had little effect on mood or affect.

Although daily dosing of off-label SSRIs is reported to be associated with superior fold increases in IELT, direct comparator studies with dapoxetine have not been conducted. Unlike dapoxetine, most off-label SSRIs have not been specifically evaluated for known class-related safety effects including potential for withdrawal effects, treatment-emergent suicidality, and effects on mood and affect in men with PE. These studies fail to provide the same robust level of efficacy and safety evidence found in the dapoxetine phase 3 study populations of over 6000 subjects. It is likely that dapoxetine may fulfil the treatment needs of many patients and its regulatory approval provide assurance to prescribers that expert and regulatory peer review has demonstrated drug efficacy and safety.

S3

Testosterone and Obesity – The Role of Testosterone in Visceral Fat Accumulation

Dr. F. Saad
Bayer Schering Pharma, Scientific Affairs Men's Healthcare; Gulf Medical University, Research Department, Ajman, UAE; Hang Tuah University, Men's Health Reproduction Study Center, Surabaya, Indonesia

Effects of testosterone can be studied from three different perspectives:
1. Evidence from epidemiological and observational studies (without intervention)
2. Evidence from androgen deprivation therapy (standard treatment in advanced prostate cancer)
3. Evidence from testosterone treatment

Overweight and obesity present an increasing problem in every region of the world. Visceral fat mass, easily measured by taking waist circumference, has been proven to be the most important risk factor for the development of cardiovascular diseases and – even to a greater extent – type 2 diabetes. Visceral fat is positively associated with insulin resistance but – in men – negatively with testosterone. As a matter of fact, the decline of testosterone levels with age is rather a result of increasing fat accumulation than of age itself. This can be explained by the fact that visceral adipocytes produce a number of substances that suppress endogenous testosterone production at all levels of the hypothalamic-pituitary-testicular axis.

Androgen deprivation therapy leads to changes in body composition. After as little as three months of medical or surgical castration, a significant increase of fat mass and a parallel decrease of lean mass can be observed.

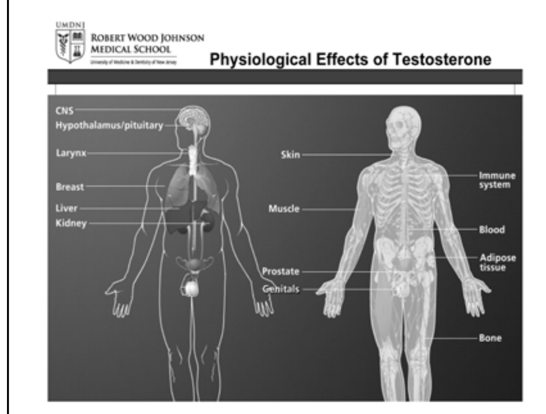
Testosterone treatment in hypogonadal men has been shown for decades to consistently increase lean mass and decrease fat mass. This has been measured in numerous studies by using methodologies such as DEXA and MRI, confirming results from more simplistic measures such as BMI and waist circumference. Not only have these effects of testosterone been shown to be dose-dependent, but they have also been shown to be rather independent from baseline testosterone levels. In other words, several studies have demonstrated that obese men who have low-normal to mid-normal levels may also benefit from testosterone treatment.

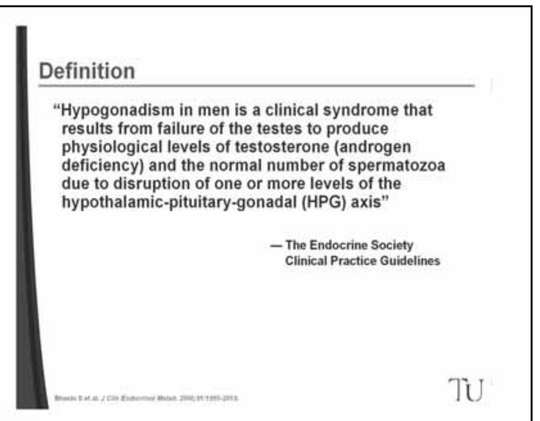
It has also been shown repeatedly that testosterone seems to have a selective effect on visceral over subcutaneous fat although it affects both compartments of adipose tissue. The beneficial effects of testosterone can be further enhanced by exercise.

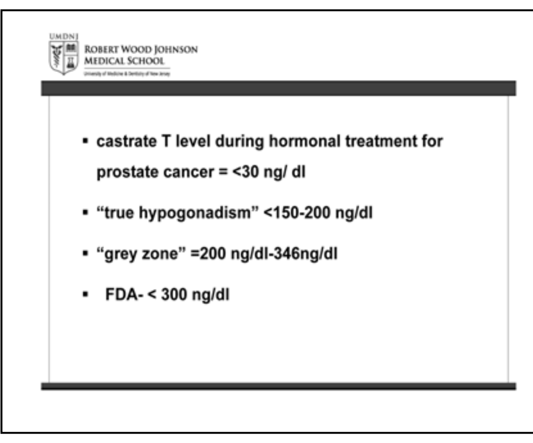
Testosterone may be a key to effectively treat visceral obesity in men.

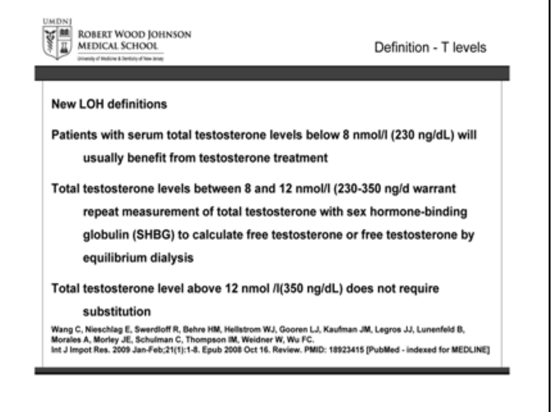
S4
The Clinical Practice of Testosterone Replacement Therapy

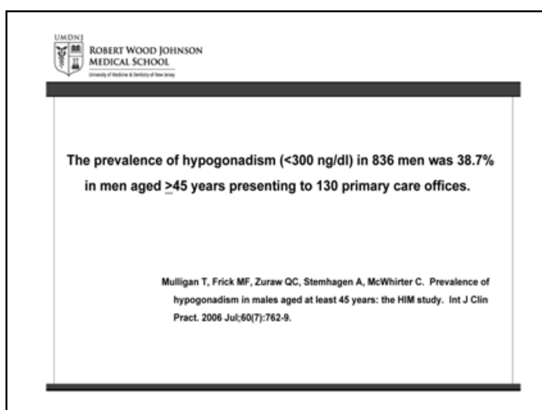
Dr. Allen D Seftel, MD
Head, Division of Urology, Cooper University Hospital, Camden, NJ
Professor of Urology Robert Wood Johnson SOM

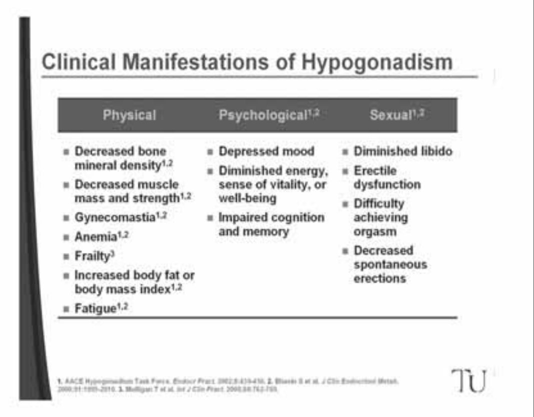


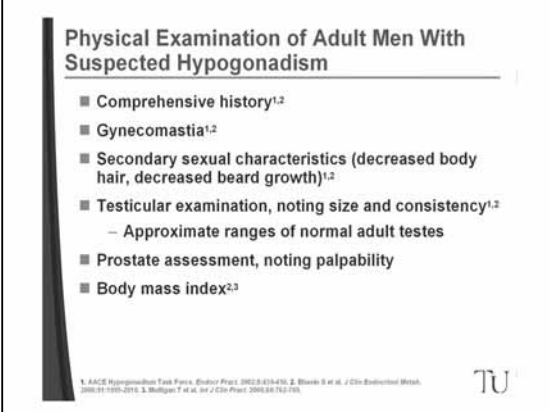


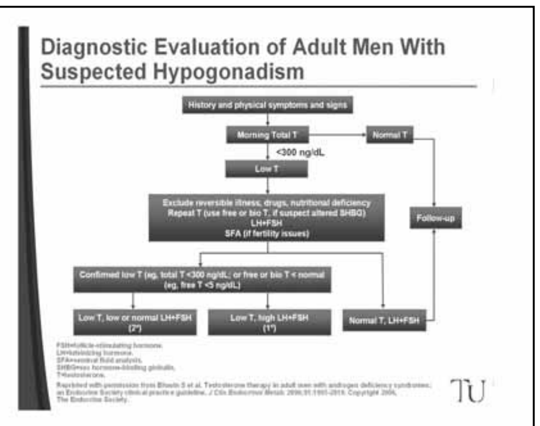


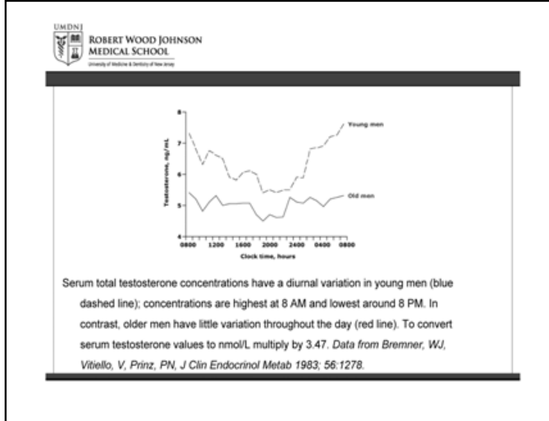


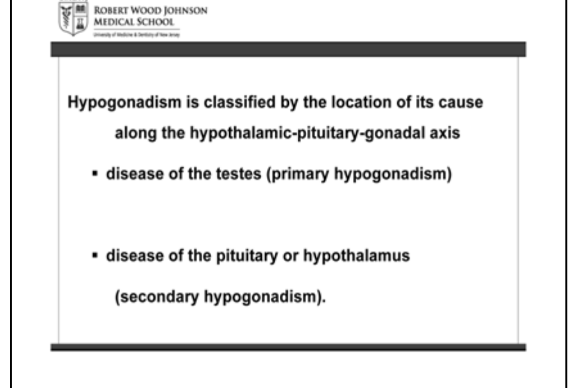


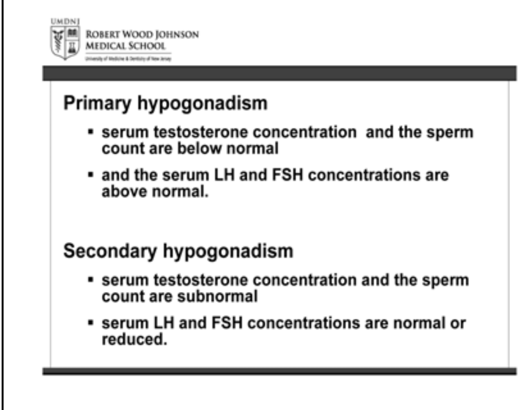


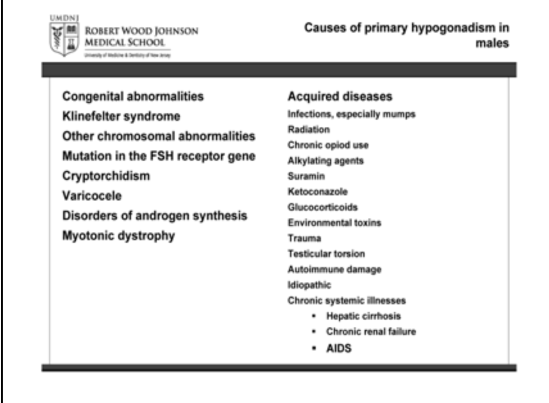

Physical Examination of Adult Men With Suspected Hypogonadism
Comprehensive history[1,2]
Gynecomastia[1,2]
Secondary sexual characteristics (decreased body hair, decreased beard growth)[1,2]
Testicular examination, noting size and consistency[1,2]
– Approximate ranges of normal adult testes
Prostate assessment, noting palpability
Body mass index[2,3]
TU

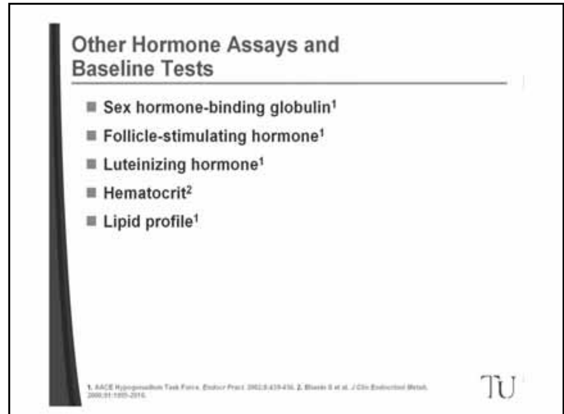

Diagnostic Evaluation of Adult Men With Suspected Hypogonadism
History and physical symptoms and signs
Morning Total T
Normal T
<300 ng/dL
Low T
Exclude reversible illness, drugs, nutritional deficiency
Repeat T (use free or bio T, if suspect altered SHBG)
LH+FSH
SFA (if fertility issues)
Follow-up
Confirmed low T (eg, total T <300 ng/dL; or free or bio T < normal (eg, free T <5 ng/dL)
Low T, low or normal LH+FSH (2°)
Low T, high LH+FSH (1°)
Normal T, LH+FSH
TU

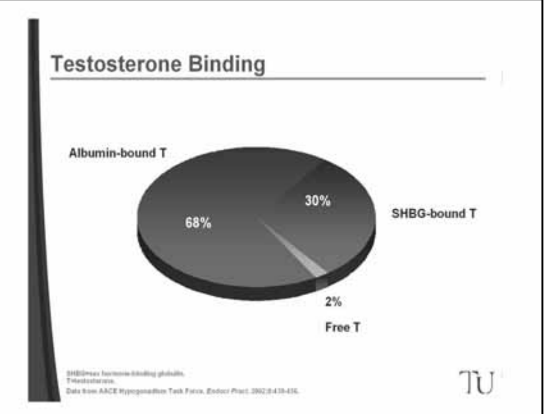

ROBERT WOOD JOHNSON MEDICAL SCHOOL
Young men
Old men
Testosterone, ng/mL
Clock time, hours
Serum total testosterone concentrations have a diurnal variation in young men (blue dashed line); concentrations are highest at 8 AM and lowest around 8 PM. In contrast, older men have little variation throughout the day (red line). To convert serum testosterone values to nmol/L multiply by 3.47. Data from Bremner, WJ, Vitiello, V, Prinz, PN, J Clin Endocrinol Metab 1983; 56:1278.

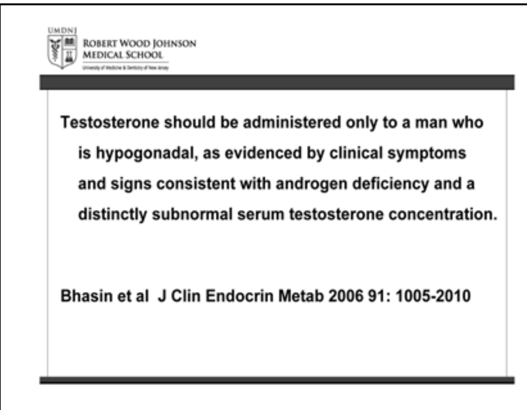

ROBERT WOOD JOHNSON MEDICAL SCHOOL
Hypogonadism is classified by the location of its cause along the hypothalamic-pituitary-gonadal axis
disease of the testes (primary hypogonadism)
disease of the pituitary or hypothalamus
(secondary hypogonadism).

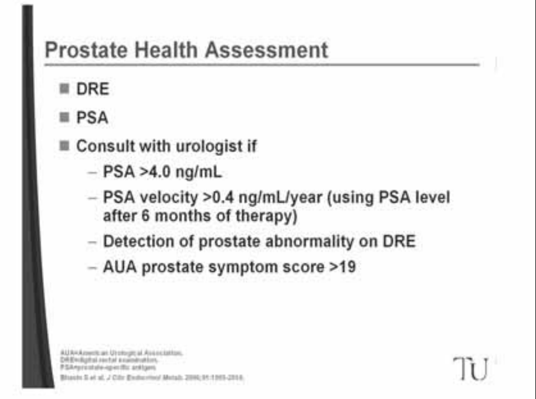

ROBERT WOOD JOHNSON MEDICAL SCHOOL
Primary hypogonadism
serum testosterone concentration and the sperm count are below normal
and the serum LH and FSH concentrations are above normal.
Secondary hypogonadism
serum testosterone concentration and the sperm count are subnormal
serum LH and FSH concentrations are normal or reduced.

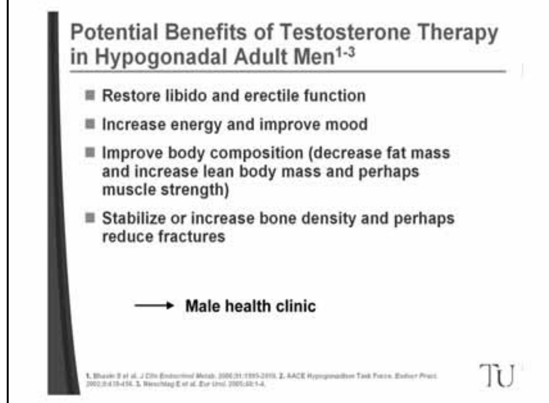

ROBERT WOOD JOHNSON MEDICAL SCHOOL
Causes of primary hypogonadism in males
Congenital abnormalities
Klinefelter syndrome
Other chromosomal abnormalities
Mutation in the FSH receptor gene
Cryptorchidism
Varicocele
Disorders of androgen synthesis
Myotonic dystrophy
Acquired diseases
Infections, especially mumps
Radiation
Chronic opiod use
Alkylating agents
Suramin
Ketoconazole
Glucocorticoids
Environmental toxins
Trauma
Testicular torsion
Autoimmune damage
Idiopathic
Chronic systemic illnesses
Hepatic cirrhosis
Chronic renal failure
AIDS

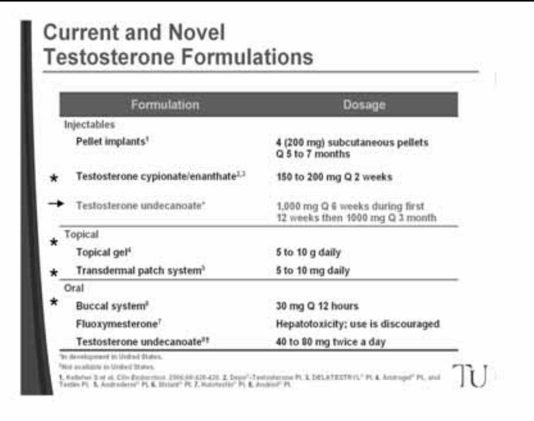




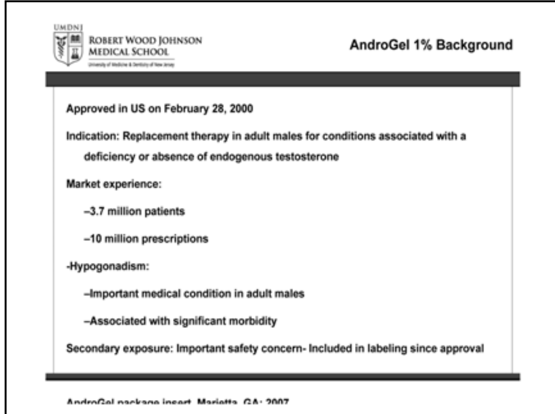


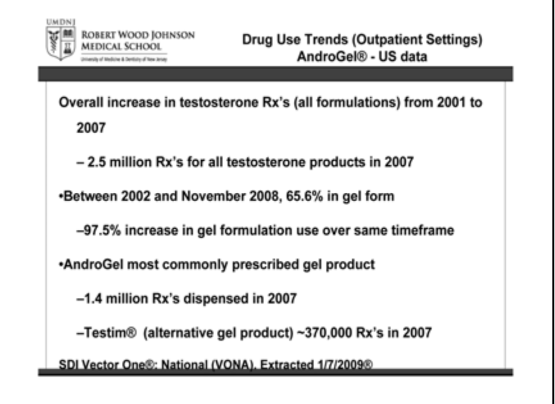


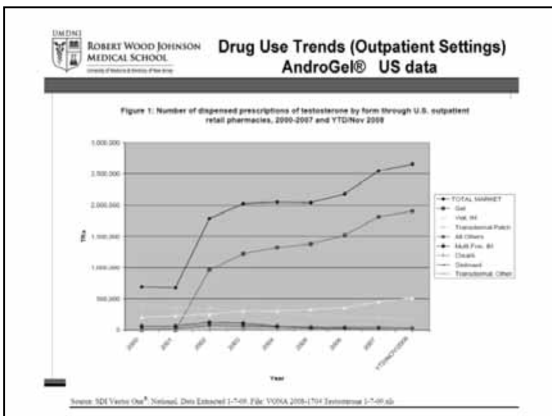


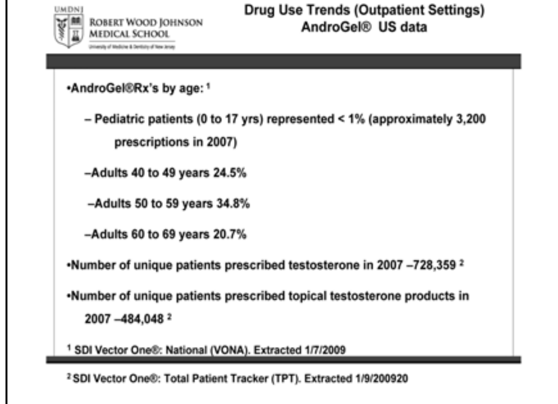


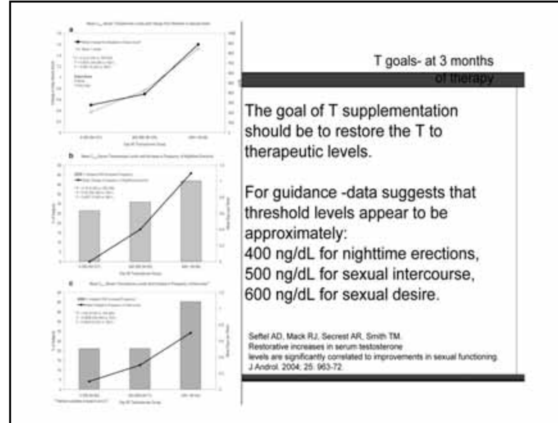
	Formulation	Dosage
	Injectables	
	Pellet implants[1]	4 (200 mg) subcutaneous pellets Q 5 to 7 months
*	Testosterone cypionate/enanthate[2,3]	150 to 200 mg Q 2 weeks
→	Testosterone undecanoate*	1,000 mg Q 6 weeks during first 12 weeks then 1000 mg Q 3 month
*	Topical	
	Topical gel[4]	5 to 10 g daily
*	Transdermal patch system[5]	5 to 10 mg daily
	Oral	
*	Buccal system[6]	30 mg Q 12 hours
	Fluoxymesterone[7]	Hepatotoxicity; use is discouraged
	Testosterone undecanoate[8†]	40 to 80 mg twice a day

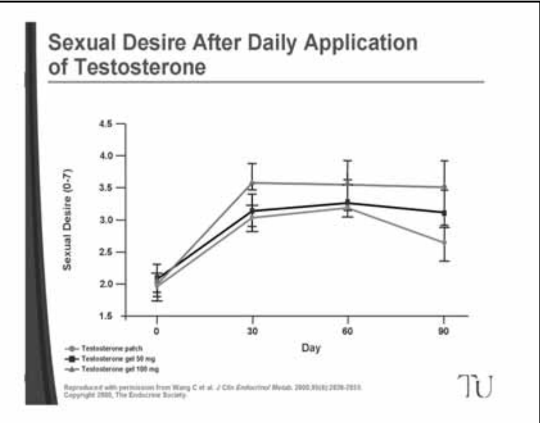

ROBERT WOOD JOHNSON MEDICAL SCHOOL
AndroGel 1% Background
Approved in US on February 28, 2000
Indication: Replacement therapy in adult males for conditions associated with a deficiency or absence of endogenous testosterone
Market experience:
–3.7 million patients
–10 million prescriptions
-Hypogonadism:
–Important medical condition in adult males
–Associated with significant morbidity
Secondary exposure: Important safety concern- Included in labeling since approval

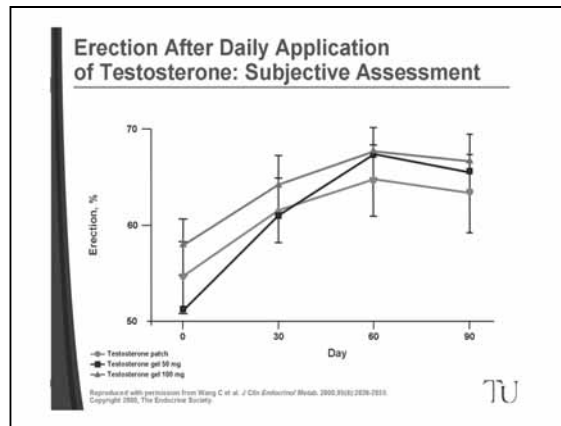

ROBERT WOOD JOHNSON MEDICAL SCHOOL
Drug Use Trends (Outpatient Settings)
AndroGel® - US data
Overall increase in testosterone Rx's (all formulations) from 2001 to 2007
– 2.5 million Rx's for all testosterone products in 2007
•Between 2002 and November 2008, 65.6% in gel form
–97.5% increase in gel formulation use over same timeframe
•AndroGel most commonly prescribed gel product
–1.4 million Rx's dispensed in 2007
–Testim® (alternative gel product) ~370,000 Rx's in 2007
SDI Vector One®: National (VONA). Extracted 1/7/2009®

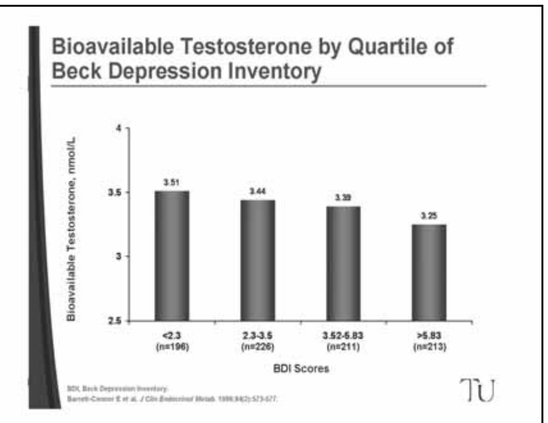

ROBERT WOOD JOHNSON MEDICAL SCHOOL
Drug Use Trends (Outpatient Settings)
AndroGel® US data
Figure 1: Number of dispensed prescriptions of testosterone by form through U.S. outpatient retail pharmacies, 2000-2007 and YTD/Nov 2008
TOTAL MARKET
Gel
Year

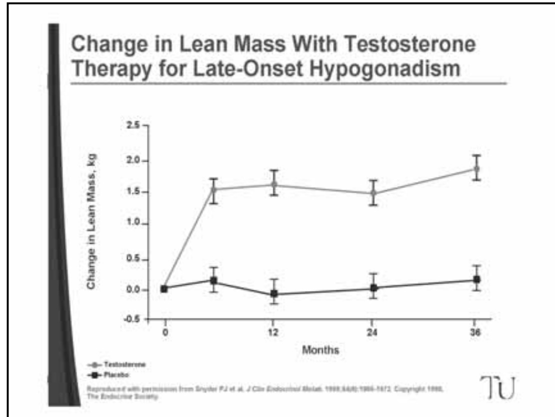

ROBERT WOOD JOHNSON MEDICAL SCHOOL
Drug Use Trends (Outpatient Settings)
AndroGel® US data
•AndroGel®Rx's by age: 1
– Pediatric patients (0 to 17 yrs) represented < 1% (approximately 3,200 prescriptions in 2007)
–Adults 40 to 49 years 24.5%
–Adults 50 to 59 years 34.8%
–Adults 60 to 69 years 20.7%
•Number of unique patients prescribed testosterone in 2007 –728,359 2
•Number of unique patients prescribed topical testosterone products in 2007 –484,048 2
1 SDI Vector One®: National (VONA). Extracted 1/7/2009
2 SDI Vector One®: Total Patient Tracker (TPT). Extracted 1/9/200920

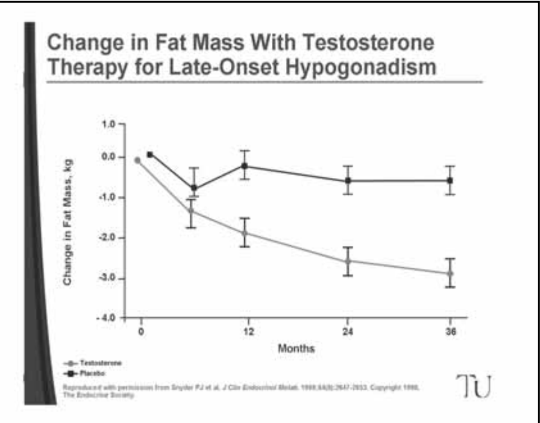

T goals- at 3 months of therapy
The goal of T supplementation should be to restore the T to therapeutic levels.
For guidance -data suggests that threshold levels appear to be approximately:
400 ng/dL for nighttime erections,
500 ng/dL for sexual intercourse,
600 ng/dL for sexual desire.
Seftel AD, Mack RJ, Secrest AR, Smith TM. Restorative increases in serum testosterone levels are significantly correlated to improvements in sexual functioning. J Androl. 2004; 25: 963-72.

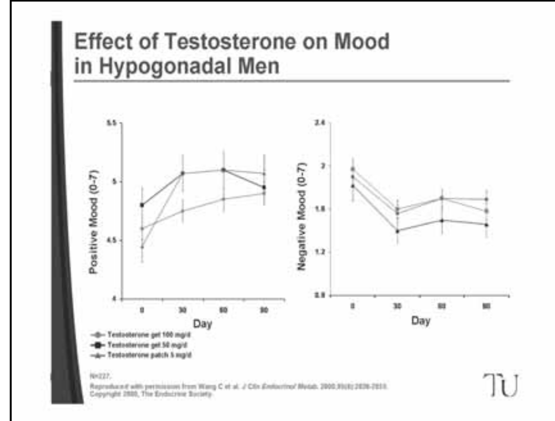

Sexual Desire After Daily Application of Testosterone
Sexual Desire (0-7)
Day
Testosterone patch
Testosterone gel 50 mg
Testosterone gel 100 mg

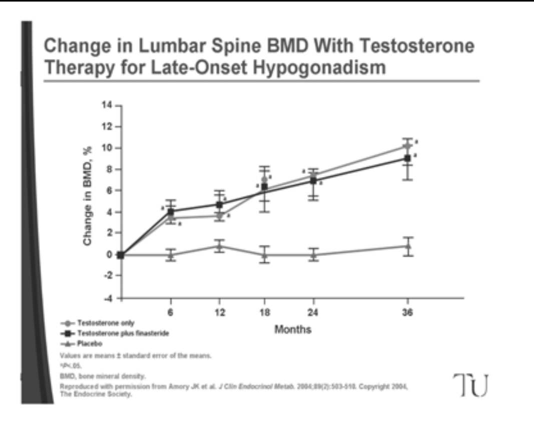

Erection After Daily Application of Testosterone: Subjective Assessment
Erection, %
70
60
50
0
30
60
90
Day
Testosterone patch
Testosterone gel 50 mg
Testosterone gel 100 mg
TU

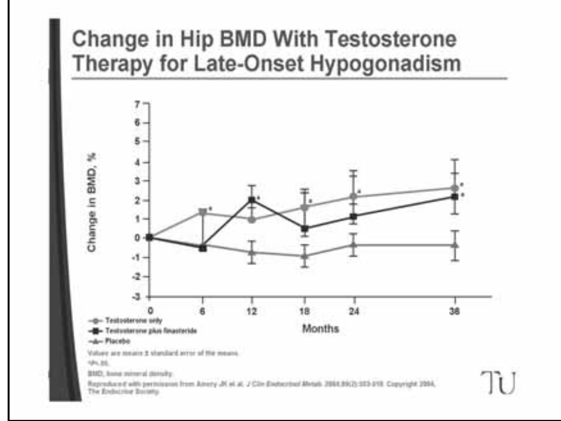

Bioavailable Testosterone by Quartile of Beck Depression Inventory
Bioavailable Testosterone, nmol/L
4
3.5
3
2.5
3.51
3.44
3.39
3.25
<2.3 (n=196)
2.3-3.5 (n=226)
3.52-5.83 (n=211)
>5.83 (n=213)
BDI Scores
TU

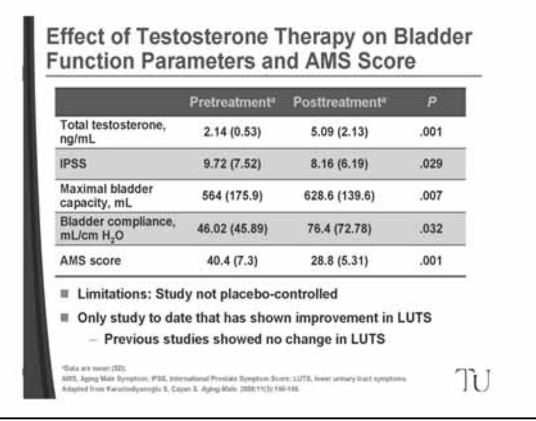

Change in Lean Mass With Testosterone Therapy for Late-Onset Hypogonadism
Change in Lean Mass, kg
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
0
12
24
36
Months
Testosterone
Placebo
TU


Change in Fat Mass With Testosterone Therapy for Late-Onset Hypogonadism
Change in Fat Mass, kg
1.0
0.0
-1.0
-2.0
-3.0
-4.0
0
12
24
36
Months
Testosterone
Placebo
TU

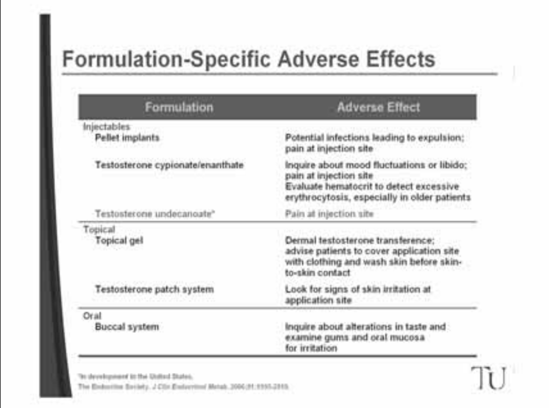

Effect of Testosterone on Mood in Hypogonadal Men
Positive Mood (0-7)
Negative Mood (0-7)
Day
Day
TU


Change in Lumbar Spine BMD With Testosterone Therapy for Late-Onset Hypogonadism
Change in BMD, %
14
12
10
8
6
4
2
0
-2
-4
6
12
18
24
36
Months
Testosterone only
Testosterone plus finasteride
Placebo
Values are means ± standard error of the means.
aP<.05.
BMD, bone mineral density.
Reproduced with permission from Amory JK et al. J Clin Endocrinol Metab. 2004;89(2):503-510. Copyright 2004, The Endocrine Society.
TU

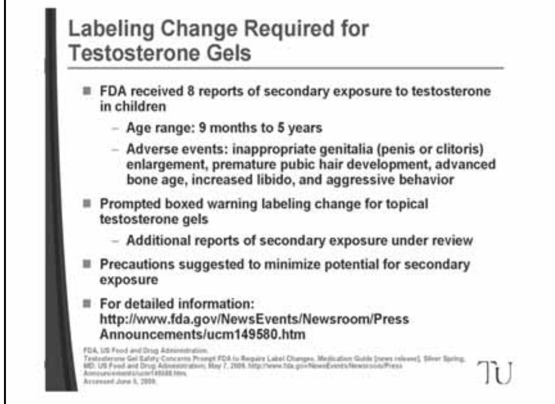


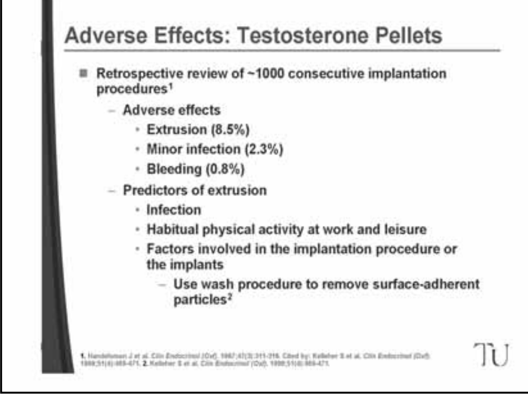


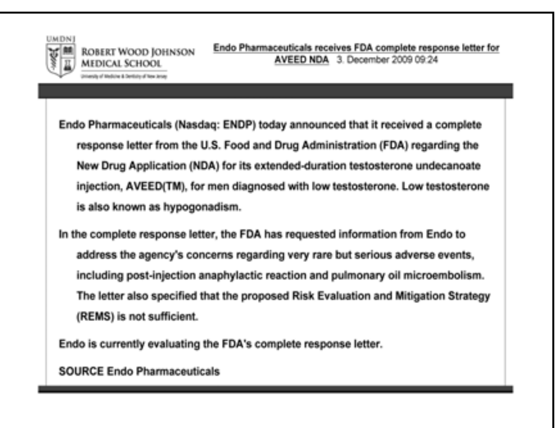
	Pretreatment[a]	Posttreatment[a]	*P*
Total testosterone, ng/mL	2.14 (0.53)	5.09 (2.13)	.001
IPSS	9.72 (7.52)	8.16 (6.19)	.029
Maximal bladder capacity, mL	564 (175.9)	628.6 (139.6)	.007
Bladder compliance, mL/cm H_2O	46.02 (45.89)	76.4 (72.78)	.032
AMS score	40.4 (7.3)	28.8 (5.31)	.001



Formulation	Adverse Effect
Injectables	
Pellet implants	Potential infections leading to expulsion; pain at injection site
Testosterone cypionate/enanthate	Inquire about mood fluctuations or libido; pain at injection site Evaluate hematocrit to detect excessive erythrocytosis, especially in older patients
Testosterone undecanoate[a]	Pain at injection site
Topical	
Topical gel	Dermal testosterone transference; advise patients to cover application site with clothing and wash skin before skin-to-skin contact
Testosterone patch system	Look for signs of skin irritation at application site
Oral	
Buccal system	Inquire about alterations in taste and examine gums and oral mucosa for irritation






UMDNJ ROBERT WOOD JOHNSON MEDICAL SCHOOL

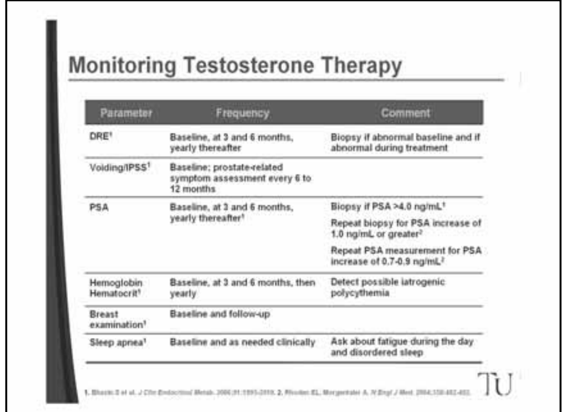
Endo Pharmaceuticals receives FDA complete response letter for AVEED NDA 3. December 2009 09:24

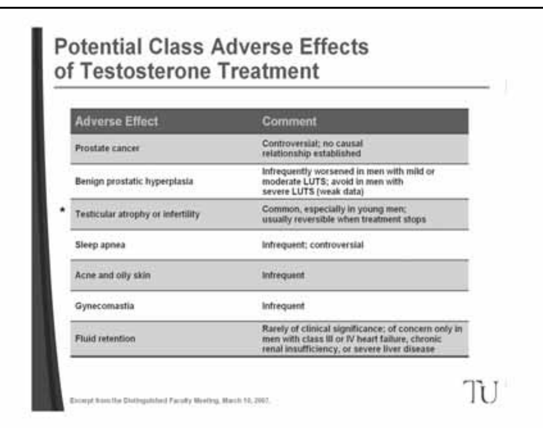
Endo Pharmaceuticals (Nasdaq: ENDP) today announced that it received a complete response letter from the U.S. Food and Drug Administration (FDA) regarding the New Drug Application (NDA) for its extended-duration testosterone undecanoate injection, AVEED(TM), for men diagnosed with low testosterone. Low testosterone is also known as hypogonadism.

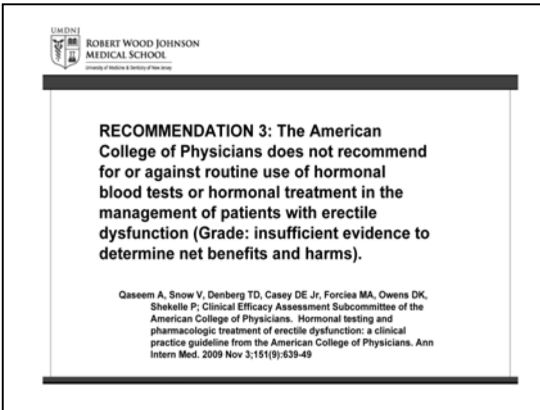
In the complete response letter, the FDA has requested information from Endo to address the agency's concerns regarding very rare but serious adverse events, including post-injection anaphylactic reaction and pulmonary oil microembolism. The letter also specified that the proposed Risk Evaluation and Mitigation Strategy (REMS) is not sufficient.

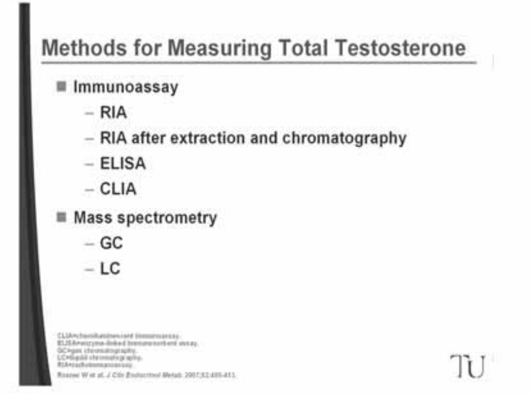
Endo is currently evaluating the FDA's complete response letter.

SOURCE Endo Pharmaceuticals

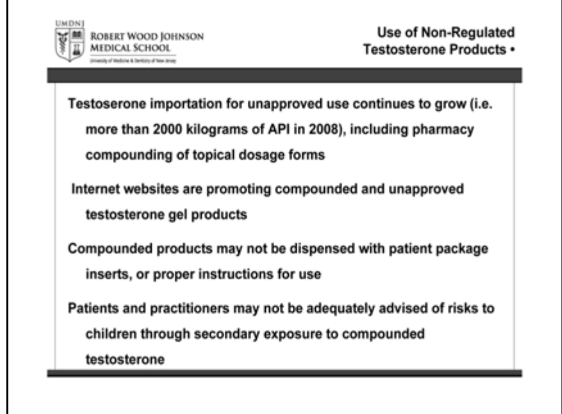

Monitoring Testosterone Therapy
Parameter
Frequency
Comment
DRE[1]
Baseline, at 3 and 6 months, yearly thereafter
Biopsy if abnormal baseline and if abnormal during treatment
Voiding/IPSS[1]
Baseline; prostate-related symptom assessment every 6 to 12 months
PSA
Baseline, at 3 and 6 months, yearly thereafter[1]
Biopsy if PSA >4.0 ng/mL[1]
Repeat biopsy for PSA increase of 1.0 ng/mL or greater[2]
Repeat PSA measurement for PSA increase of 0.7-0.9 ng/mL[2]
Hemoglobin Hematocrit[1]
Baseline, at 3 and 6 months, then yearly
Detect possible iatrogenic polycythemia
Breast examination[1]
Baseline and follow-up
Sleep apnea[1]
Baseline and as needed clinically
Ask about fatigue during the day and disordered sleep
TU


Potential Class Adverse Effects of Testosterone Treatment
Adverse Effect
Comment
Prostate cancer
Controversial; no causal relationship established
Benign prostatic hyperplasia
Infrequently worsened in men with mild or moderate LUTS; avoid in men with severe LUTS (weak data)
Testicular atrophy or infertility
Common, especially in young men; usually reversible when treatment stops
Sleep apnea
Infrequent; controversial
Acne and oily skin
Infrequent
Gynecomastia
Infrequent
Fluid retention
Rarely of clinical significance; of concern only in men with class III or IV heart failure, chronic renal insufficiency, or severe liver disease
TU


UMDNJ
ROBERT WOOD JOHNSON
MEDICAL SCHOOL
RECOMMENDATION 3: The American College of Physicians does not recommend for or against routine use of hormonal blood tests or hormonal treatment in the management of patients with erectile dysfunction (Grade: insufficient evidence to determine net benefits and harms).
Qaseem A, Snow V, Denberg TD, Casey DE Jr, Forciea MA, Owens DK, Shekelle P; Clinical Efficacy Assessment Subcommittee of the American College of Physicians. Hormonal testing and pharmacologic treatment of erectile dysfunction: a clinical practice guideline from the American College of Physicians. Ann Intern Med. 2009 Nov 3;151(9):639-49


Methods for Measuring Total Testosterone
Immunoassay
– RIA
– RIA after extraction and chromatography
– ELISA
– CLIA
Mass spectrometry
– GC
– LC
TU

Difficulties With Testosterone Assays
Vary depending on age, gender, and presence of comorbid conditions[1]
Vary with time of day[1,2]
Interference from other circulating steroids[1]
No universally recognized testosterone-calibrating standard[1]
TU


UMDNJ
ROBERT WOOD JOHNSON
MEDICAL SCHOOL
Use of Non-Regulated Testosterone Products •
Testoserone importation for unapproved use continues to grow (i.e. more than 2000 kilograms of API in 2008), including pharmacy compounding of topical dosage forms
Internet websites are promoting compounded and unapproved testosterone gel products
Compounded products may not be dispensed with patient package inserts, or proper instructions for use
Patients and practitioners may not be adequately advised of risks to children through secondary exposure to compounded testosterone

【LUNCH SYMPOSIUM】

Prevalence and Clinical Experience of Premature Ejaculation(PE) in Taiwan

張進寶醫師
彰化基督教醫院泌尿外科主任

Traditional definitions of premature ejaculation : DSM-IV-TR

- Persistent or recurrent ejaculation with minimal sexual stimulation before, upon, or shortly after penetration and before he wished it that "causes marked distress or interpersonal difficulty "and "is not due exclusively to the direct effects of a substance"
- Three key factors : diminished intravaginal ejaculatory latency time(IELT) , the loss of voluntary control over ejaculation and the presence of marked distress or bother for the patient and / or partner

Evidence-based definition of life-long PE

The International Society for Sexual Medicine (ISSM) definition of life-long premature ejaculation:

Premature Ejaculation is a male sexual dysfunction characterised by:

- Ejaculation which always or nearly always occurs prior to or within about **one minute** of vaginal penetration; *and*
- **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

McMahon et al (2008) J Sex Med 5:1590–1606

Different types of PE

Life-long or 'primary'	Acquired or 'secondary'
• Impairment of serotonergic pathways controlling ejaculation?	• Impairment of serotonergic pathways controlling ejaculation? • Psychological • Organic • Associated with other sexual dysfunctions

Screponi et al. (2001) Urology 58:198-201; Jannini et al. (2002) J Endocrinol Invest 25:1006-1019; Waldinger (2002) J Urol 168:2359-2367; Carani et al. (2005) J Clin Endocrinol Metab 90:6472-6479; Jannini et al. (2005) Curr Opin Urol 15:399-403

Acquired PE

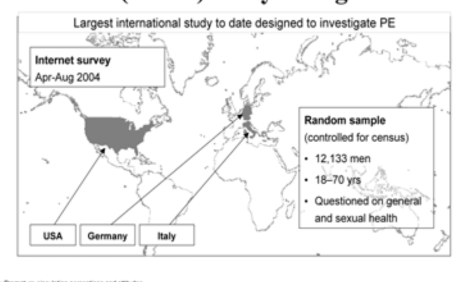
Acquired PE is a sub-type of premature ejaculation characterised by:

- **A substantial decrease in time-to-ejaculation compared to a man's previous sexual experience;**
- 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*

*Further clinical research is required to obtain IELT and PRO-data for acquired PE.

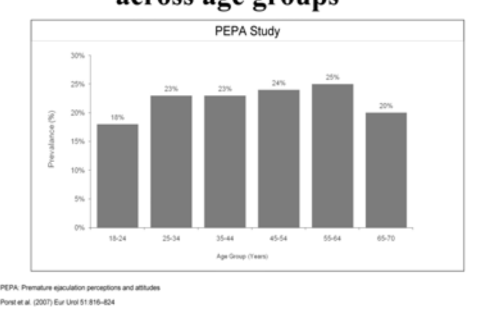
EAA-ISSM interim position statement on acquired premature ejaculation (2008) [Prof Jannini personal communication]

Premature ejaculation perceptions and attitudes (PEPA) study background

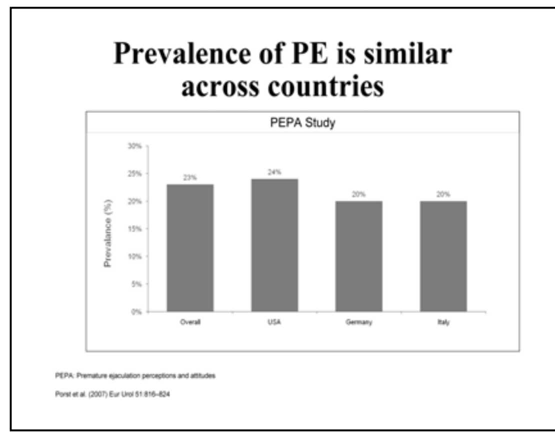


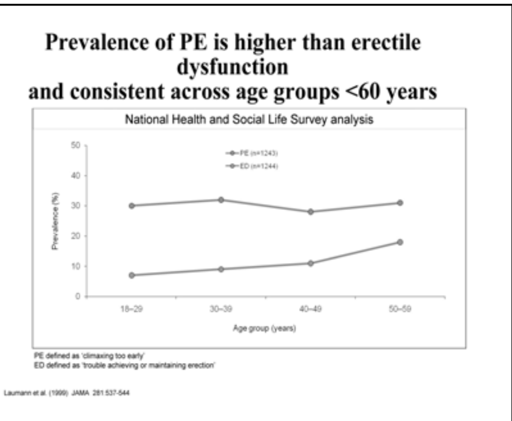
PEPA: Premature ejaculation perceptions and attitudes
Porst et al. (2007) Eur Urol 51:816–824

Prevalence of PE is consistent across age groups



PEPA: Premature ejaculation perceptions and attitudes
Porst et al. (2007) Eur Urol 51:816–824





Demography

性別

◆男性 2611人 (77%)

◆女性 777人 (23%)

年齡

- 18歲以下 1人 (0%)
- 18歲~35歲 2080人 (61%)
- 36歲~45歲 794人 (23%)
- 46歲~55歲 387人 (11%)
- 56歲~65歲 108人 (3%)
- 65歲以上 18人 (1%)

Premature Ejaculation ---PEDT

PEDT判定的早洩	人數	比例
早洩	438	13%
可能早洩	334	10%
正常	2544	75%
遺漏值	72	2%

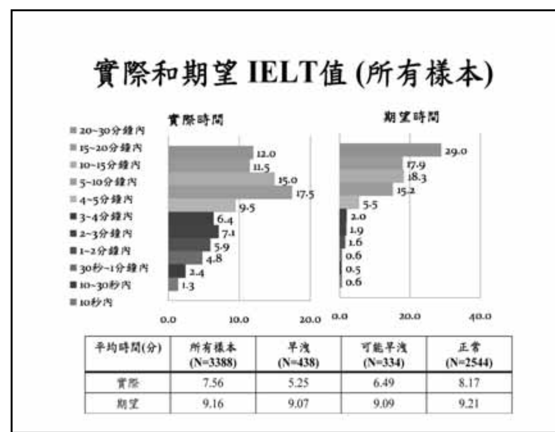
PEDT判定的早洩中，全部樣本共有13%的填答者有早洩的傾向，10%則有可能早洩的傾向。

若累計分數大於等於11分，確定為早洩；分數介於9-10分，則可能為早洩；分數小於等於8分則沒有早洩。

PEDT 早洩診斷問卷

	一點也不困難	有點困難	困難	很困難	非常困難
1. 延遲射精對您來說有多困難?	0	1	2	3	4
	幾乎沒有或 沒有 0%	少於一半的次數 25%	有一半的次數 50%	超過一半的次數 75%	幾乎每次或每次 100%
2. 您是否會在您想射精之前就已經射精?	0	1	2	3	4
3. 您是否會在輕微的刺激之下就會射精?	0	1	2	3	4
	一點也不會	有一點	普通	非常	極度
4. 您是否會因為您想射精之前就已經射精而感到挫折?	0	1	2	3	4
5. 您有多在意您射精的時間讓您的伴侶感到不滿足?	0	1	2	3	4

Reprinted from European Urology 52(2) Tara Symonds et al 'Development and Validation of a Premature Ejaculation Diagnostic Tool';pages 585-573. Copyright(2007) with permission from Elsevier.



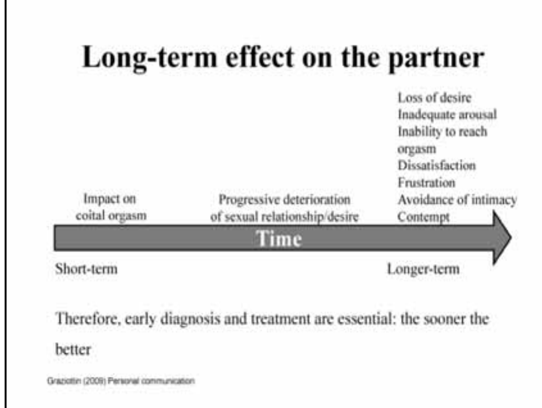
平均時間(分)	所有樣本 (N=3388)	早洩 (N=438)	可能早洩 (N=334)	正常 (N=2544)
實際	7.56	5.25	6.49	8.17
期望	9.16	9.07	9.09	9.21

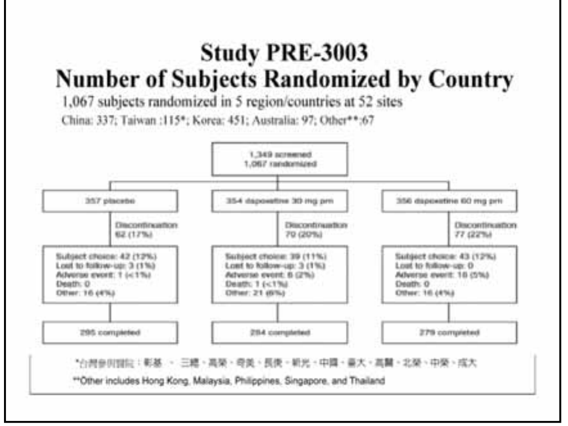
PE may cause serious psychological problems for patients and/or partners

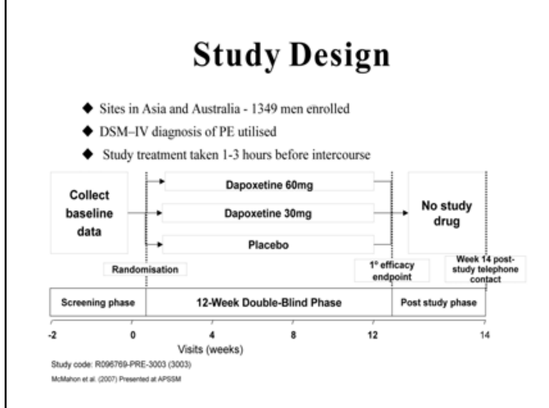
In a community based, observational study of 1,587 men and their female partners, men diagnosed with PE* had significant:

- Reductions in levels of sexual functioning
- Reductions in level of satisfaction
- Reductions in overall quality of life
- Increased levels of distress
- Increased levels of interpersonal difficulty

*Diagnosis of PE made according to Diagnostic and Statistical Manual of Mental Disorders, 4th edition, text revision (DSM-IV-TR) criteria
Rowland et al. (2007) J Urol 177: 1065-1070







R096769-PRE-3003 Efficacy Objectives

Primary

To demonstrate that 12-wk treatment with dapoxetine (30 or 60 mg p.r.n.) prolongs IELT compared to PBO in men with PE

Key Secondary

To assess the effect of dapoxetine 30 or 60 mg for 12 wks compared to PBO on the percentage of subjects who met the following criteria:

≥ 2- category increase in Control Over Ejaculation and ≥ 1- category decrease in Personal Distress (a responder),

≥ 1- category decrease in Personal Distress, and

≥ 1- category increase in Satisfaction with Sexual Intercourse

R096769-PRE-3003 Efficacy Objectives

Other Secondary

To assess the effect of dapoxetine treatment for 12 wks compared to PBO on changes in the following efficacy evaluations at each visit:

- Clinical Global Impression of Change
- Control Over Ejaculation
- Satisfaction With Sexual Intercourse
- Symptom Severity Impression
- Personal Distress
- Interpersonal Difficulty
- Medication Helpfulness Question
- Change in average IELT
- The number of all intercourse attempts
- Average duration of all intercourse attempts

Study Population

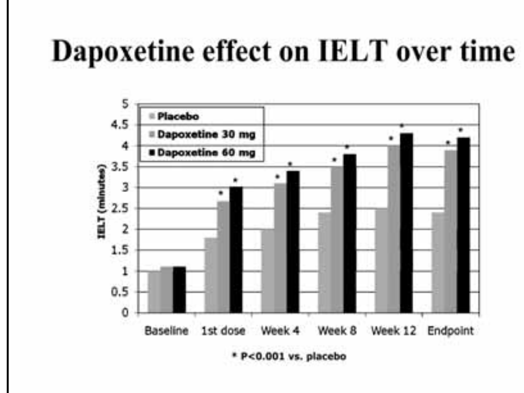
- ≥18 yrs old subjects in a stable, monogamous heterosexual relationship for ≥ 6 months and maintain this relationship for the duration of the study
- Met PE diagnostic criteria as specified in the DSM-IV-TR for ≥ 6 months before enrolling in the study:
  - In the majority of intercourse experiences experienced onset of orgasm and ejaculation with minimal sexual stimulation before, on, or shortly after penetration and before he wished it
  - It had caused at least moderate distress and/or interpersonal difficulty
  - PE had not been exclusively due to the direct effect of a substance

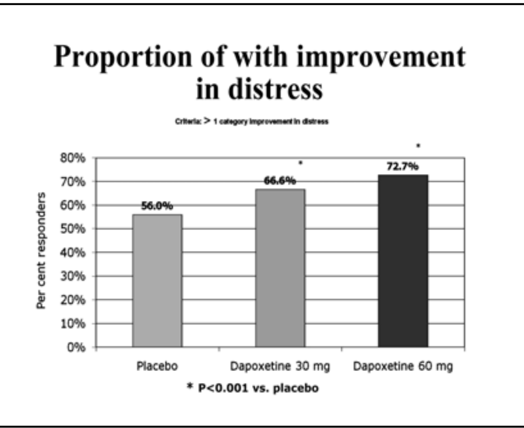
Study Population

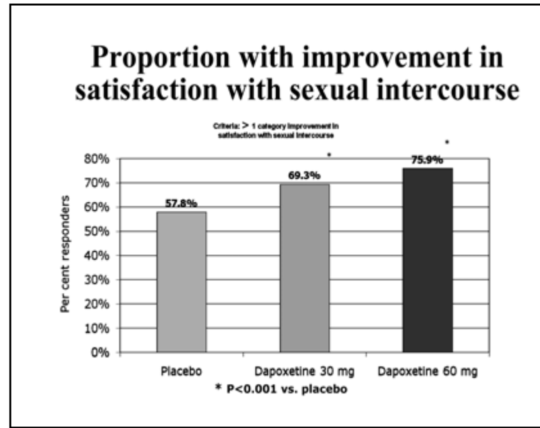
- A qualifying IELT of ≤2 minutes in a minimum of 75% of evaluable events with an interval of ≥20 hrs between ejaculations
- In good general health with no clinically relevant abnormalities:
  med. Hx, physical exam, blood chemistry, CBC, UA, and 12-lead ECG

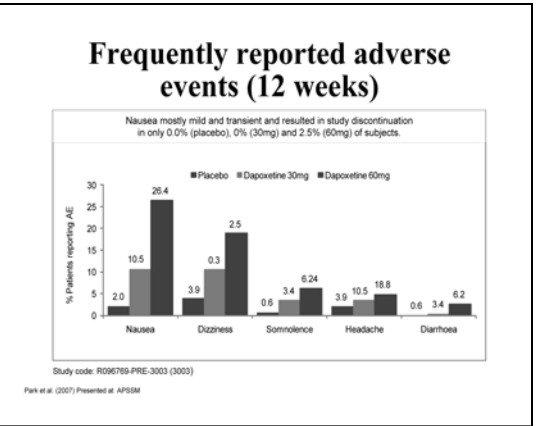
Demographic and baseline characteristics were balanced across treatment groups

Age (years)	Placebo	Dapoxetine 30mg	Dapoxetine 60mg
Mean (SD)	40.6 (9.71)	41.2 (10.74)	41.0 (10.78)
Race			
Asian	92%	91%	92%
White	7%	8%	8%
Black	0		
Other	< 1%	< 1%	< 1%
Region/Country			
China	31%	32%	32%
Korea	42%	43%	42%
Taiwan	**11%**	**11%**	**11%**
Australia	9%	9%	9%
Other Asian	7%	6%	6%
Lifelong PE	55%	57%	58%
IELT ≤ 0.5 minute	15%	12%	14%
IELT ≤ 1 minute	45%	45%	45%
IELT ≥ 1-2 minute	55%	55%	54%









Conclusions

Dapoxetine improves symptoms of PE

- Subject responses to PRO measures indicate high levels of PE symptomatology
- Dapoxetine treatment resulted in significant improvement in IELT beginning as early as first dose
- Key secondary endpoints indicate a meaningful treatment benefit to the subjects

Dapoxetine is generally well tolerated

- Most common AEs are GI and nervous system related
- Low discontinuation rate due to AEs
- Little or no effect on sexual function by IIEF or AE reporting
- No adverse cardiovascular effects observed in 3003

特別演講

The Efficacy and Safety of Once Daily Tadalafil on Erectile Function and Lower Urinary Tract Symptoms (LUTS) in Men with Erectile Dysfunction (ED) and Benign Prostatic Hyperplasia (BPH)

Chi Ju Wu, MD FICS
Su Tan Urology Clinic

Lower Urinary tract symptom (LUTS) and sexual dysfunction are highly prevalent in aging men. In a cross-sectional study of men attending urology clinics, prevalence estimates of 56% (BPH-LUTS) and 40% (ED) have been reported in men >40 yr of age. (Glina S 2006).These conditions are frequently associated in the same men, may have common pathophysiologic mechanisms, and contribute negatively to quality of life.

Possible links between LUTS and ED had been noted in several current studies. They include changes in the nitric oxide synthesis (NOS) and guanosin monophosphate (cGMP) pathways in the prostate and penis, Rho-kinase activation, endothelium pathway modulation, autonomic hyperactivity and changes secondary to pelvic atherosclerosis. Nitric oxide–cyclic guanosine monophosphate signaling has been shown to result in smooth muscle relaxation in corpus cavernosal tissue and in the bladder neck, the urethra, and the prostate (McVary K. 2006).

Several studies assessed the role of the nitric oxide/cGMP signalling pathway in the regulation of the prostate tone, with the support of clinical observations. PDE5-Is can also represent a potential mode of action allowing the targeting of transcriptional activity implicated in the regulation of the progression of the inflammatory process involved in BPH. PDE5-Is can inhibit human stromal cell proliferation of the prostate mediated by cGMP accumulation. In the study of Tobias S (2009), PDE5-Is seems to exert positive effects to a greater degree on detrusor activity rather than directly on the prostate. The future use of PDE5-Is as prophylaxis for LUTS or as primary treatments for LUTS/overactive bladder looms as a possibility, especially in those who have concurrent ED. Further, treatment of LUTS with PDE5-Is may not necessarily be limited to the treatment of men but could be used for the treatment of LUTS in women.

Although the precise mechanism of action by which PDE5-Is may alleviated LUTS is not completely understood, daily dosing of PDE5-Is have received

increasing attention for treating both LUTS and ED. Multiple large clinical trials have shown a benefit in LUTS after PDE5-Is treatment. PDE5 inhibitors show promise as a future treatment for LUTS, either in conjunction with existing therapies or as a primary treatment.

PDE5-Is is currently the golden standard first line drug in the treatment of ED. The pharmacokinetic characteristics of tadalafil differ from the other two PDE5-Is (sildenafil and vardenafil). The mean half-life for both sildenafil and vardenafil is about 4 h, whereas the mean half-life of tadalafil is 17.5h .Taladafil (Cialis) was approved in 2003 in 5-mg,10-mg, and 20-mg doses as the first and only phosphodiesterase type 5 inhibitor to provide sustained efficacy for up to 36 hours. The pharmacokinetic characteristics of tadalafil are amenable to once-a-day dosing, Daily treatment with tadalafil 2.5 and 5mg was approved by the US Food and Drug Administration in January 2008 based on the safety and efficacy profile . "Flexible love life without time constraints" in ED patients is no more than a dream. Treatment with daily tadalafil was associated with a significantly higher IIEF erectile function domain score and completion of successful intercourse compared with on-demand tadalafil. (Chris McMahon 2005). Steady-state plasma concentrations are attained within approximately 5 days of once-daily dosing and the degree of drug accumulation is approximately 1.6-fold of the exposure after a single dose (Forgue 2006)

The efficacy and safety of tadalafil administered once daily has been established in three doubleblind, placebo-controlled clinical studies, two conducted in the general ED population (Porst 2006, Rajfer 2007), and one in patients with ED and diabetes. (Hatzichristou 2008). These studies demonstrated that tadalafil 2.5mg, 5mg and 10mg administered once daily compared to placebo is a safe and effective treatment for ED.

Porst et al (2009) present interesting data on the effects of once-daily tadalafil on erectile function over a 12-wk period in sexually active men with ED and moderate to severe BPH-LUTS. International Prostate Symptom Score (IPSS) improvements from baseline to end point were significantly greater for all tadalafil doses versus placebo. Tadalafil 5mg provided the optimal risk-to-benefit profile of the doses studied. This study shows that tadalafil is effective in the treatment of ED in a wide range of patients with BPH-LUTS, with results that are comparable to those obtained in the general population with ED. Although in this study IPSS significantly decreased with all tadalafil doses, no clinically significant improvement was observed in maximum flow rate and post void residual volume.

Yet, tadalafil had significant relief in symptoms such as incomplete voiding, weak urinary stream, and/or difficulty starting urination, despite the lack of a statistically significant increase in Qmax. (Roehrborn 2009) Further studies are needed to determine whether the effects of tadalafil on BPH-LUTS are maintained with longer follow-up and whether this drug can also prevent urinary retention and the future need of surgical treatment for BPH.

Presently, the use of PDE5-Is to treat to BPH-LUTS is off-label. It is unclear whether we can effectively treat bladder outlet obstruction and the related LUTS with tadalafil alone in all BPH patients or if combination therapies with a-blockers or 5a-reductase inhibitors are necessary in men with higher IPSS scores or larger prostates. The role of this drug in the medical treatment of patients with ED and BPH-LUTS necessitate further elucidated.

B1

男性學論文獎-臨床組

Journal Sexual Medecine 2009;6:1072-1080

Sexual Dysfunction in Men Who Abuse Illicit Drugs: A Preliminary Report

Bang-Ping Jiann, MD
Division of Urology, Department of Surgery
Kaohsiung Veterans General Hospital

Introduction: Despite being seen as aphrodisiacs, illicit drugs are reported to have detrimental effects on male sexual function but most studies have been based on small case numbers with ambiguous results.

AIMs: To assess the impact of illicit drugs abuse on male sexual function.

Main Outcome Measures: International Index of Erectile Function (IIEF) and global assessment questions.

Methods: Illicit drug abusers in a Drug Abstention and Treatment Center were recruited to complete the questionnaires and their data were compared with an age-matched control.

Results: The abusers (N=701, mean age 33,8 yrs) had a lower mean IIEF score in each domain than that of the controls (N=196, mean age 35.4 yrs). Heroin, amphetamine and MDMA ('Ecstasy') were the leading drugs used. Erectile dysfunction (ED) was reported in 36.4% of the abusers and the odds ratio of having ED (compared with the controls) in mono-users of heroin, amphetamine and MDMA was 4.8 ($p<0.05$), 3.2 ($p<0.05$) and 1.4 ($p>0.05$), respectively. Of the abusers, 38.6% reported to have decreased sexual desire with illicit drug use, more often seen in the heroin mono-users (46.7%), and 18.4% reported to have enhanced sexual desire, more often seen in the amphetamine mono-users (22.6%). Mean IIEF sexual desire domain score of the abusers was lower than that of the control, even for those who reported to have enhanced sexual desire. Increased and decreased ejaculation latency affected by illicit drugs was reported in 49.9 and 14.3%, respectively, of the abusers, showing no significant difference among the mono-users of 3 different drugs.

Conclusions: Illicit drug male abusers were prone to have ED, decreased sexual desire and increased ejaculation latency. ED and decreased sexual desire were most commonly seen in heroin, followed by amphetamine and MDMA mono-users, while increased ejaculation latency occurred commonly in all of the abusers.

B2
輝瑞論文獎-臨床組

Journal Sexual Medicine 2008;5:2061-2068

The Association among GNB3 C825T Polymorphism, Erectile Dysfunction, and Related Risk Factors

Yung-Chin Lee, MD.[*] Hui-Hui Lin, MS,[1] Chii-Jye Wang, MD. PhD,[*]
Chia-Chu Liu, MD.[*] Wen-Jeng Wu, MD, PhD.[*], Chun-Hsiung Huang, MD, PhD.[*]
and Lin-Li Chang, PhD.[1]
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Graduate Institute of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan
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Kaohsiung Medical University, Kaohsiung, Taiwan

Introduction: Vascular etiologies are the most common risk factors for erectile dysfunction (ED). Published studies have reported the associations of GNB3 C825T polymorphism with many vascular diseases. However, there are few reports about the association between this gene polymorphism and ED.

Aim: To investigate the associations among GNB3 C825T polymorphism, ED and related risk factors in Taiwanese subjects.

Methods: A total of 155 patients with ED and 81 healthy controls were enrolled. All the men had complete clinical histories taken. The 5-item International Index of Erectile Function (IIEF-5) was used to assess erectile conditions. The GNB3 C825T polymorphisms were determined using the polymerase chain reaction-restriction fragment length polymorphism method.

Main Outcome Measures: Patients with ED were defined as those having an IIEF-5 of < 21.

Results: 236 men were enrolled with a mean (standard deviation) age of 59.0 (10.2) years. Diabetes mellitus (DM), hypertension and age were the three most significant independent risk factors for ED in a multiple logistic regression analysis ($P = 0.008$, 0.003 and 0.007, respectively). The prevalence of DM, hypertension and body mass index (BMI) were significantly higher in GNB3 825T allele (CT/TT) carriers ($P = 0.023$, 0.049 and 0.035, respectively). There was no significant difference of ED prevalence between T and C allele carriers (69.1% vs. 56.2%, $P = 0.07$). However, the T allele carriers had significantly lower IIEF-5 scores ($P = 0.02$) associated with an increment of the T allele number (16.4(CC) vs. 14.4(CT) vs. 13.2(TT), $P = 0.04$).

Conclusions: In the present study, DM, hypertension and BMI had significant associations with GNB3 825T allele carriers. Our results failed to show a significant association of the GNB3 C825T polymorphisms with ED prevalence. However, we cannot exclude that the presence of the T allele might influence the risk for ED severity indirectly through an increased risk for some vascular diseases.

B3

男性學論文獎-基礎組

Journal of Sexual Medicine 2009;6:708-716

The Role of Chloride Channels in Rat Corpus Cavernosum: In Vivo Study

Yuh-Chen Kuo, MD[#], Shiu-Dong Chung, MD[*+], Shih-Ping Liu, MD[+]
Hong-Chiang Chang, MD[+], Hong-Jeng Yu[#], MD, and Ju-Ton Hsieh, MD[+]
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Introduction: Recent studies have identified the existence of outward, depolarizing chloride currents in isolated rat, rabbit, and human corpus cavernosum muscle cells. However, few articles have demonstrated the functional role of chloride channels in vivo in corpus cavernosum smooth muscle.

Aim: To investigate the role of calcium-dependent chloride channels in erectile function of rat corpus cavernosum smooth muscle.

Methods: Adult male Wistar rats were used to perform an in vivo study in a rat model of erection. Both crura of the rats were isolated to in order to record intracavernosal pressure (ICP) during basal condition and electrical stimulation of erection, with and without intracorporeal injection of norepinephirine, chloride transport inhibitors, and chloride channel blockers.

Main Outcome Measure: ICP.

Results: ICP increased as the amplitude of electrical stimulation increased, and decreased in a dose-dependent manner (during electrical stimulation) as norepinephrine injection strength increased. Injection into the corpus cavernosum of the Cl^- channel blockers, niflumic acid, anthracene-9-carboxylic acid, and 4, 4′-diisothiocyano-2,2′-stilbene-disulfonic acid increased ICP. Injection into the corpus cavernosum of the Cl^- channel transport inhibitors bumetanide, ethacrynic acid, and HCO_3-free-4-(2-hydroxyethyl)-1-1-piperazine ethanesulphonic acid buffer, and also increase the ICP. The effects of both Cl^- channel blockers and Cl^- channel transport inhibitors on ICP were concentration-dependent.

Conclusions: Our findings suggest that chloride channels play an important role in the regulation of corpus cavernous smooth muscle tone in vivo.

B4

輝瑞論文獎-基礎組

Journal of Andrology 2008;29:661–668

Curcumin Blocks the Activation of Androgen and Interlukin-6 on Prostate-Specific Antigen Expression in Human Prostatic Carcinoma Cells

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Curcumin, a naturally occurring compound, exhibits anticancer chemopreventive effects. We evaluated the effects and mechanisms of curcumin on the gene expression of prostate-specific antigen (PSA) in human androgen-sensitive prostatic carcinoma cells. LNCaP cells were used to determine the effect of curcumin on PSA expression. Quantitative PSA expression was assessed by reverse transcription polymerase chain reaction (RT-PCR), enzyme-linked immunosorbent assay (ELISA), and immunoblot assay. The modulation of androgen, interlukin-6 (IL-6), and prostate-derived Ets factor (PDEF) on the PSA gene was identified by transient gene expression assay with the use of a PSA reporter vector. The effect of curcumin on the activity of androgen receptors was evaluated by electrophoretic mobility shift assay (EMSA). Immunoblot assays, RTPCR, and ELISA indicated that curcumin treatments blocked the stimulation of methyltrienolone (R1881) and IL-6 on PSA gene expression in LNCaP cells. The effects of curcumin appear to be mediated via the androgen response element of PSA gene. Results from immunoblot assay and EMSA revealed the modulation of curcumin on the expression of androgen receptor and androgen receptor binding activity on androgen response element of PSA gene. Although overexpression of PDEF dramatically enhanced PSA gene expression, the results of immunoblot assays and transient reporter assays indicated that curcumin treatments did not affect the gene expression of PDEF. Curcumin inhibits R1881-and IL-6– mediated PSA gene expression in LNCaP cells through down-regulation of the expression and activity of androgen receptors.

【不孕症專題演講】

The Genetics of Male Infertility

Professor Pauline Yen
Institute of Biomedical Sciences, Academia Sinica, Taipei

Male infertility is a major andrological problem, affecting 2~5% of the male population. A man can be infertile because of his inability to produce sufficient amount of functional sperm, or because he cannot deliver the sperm to the reproductive tract of his female partner. Many environmental and genetic factors that affect a man's fertility have been identified, yet the etiology of a large fraction of the cases remains unknown. Spermatogenesis takes place in the seminiferous tubules in the testis. It is a complex process and requires the coordinated expression and regulation of many genes. It is suggested that over 7% of the human transcriptome participate in the making of sperm. Two major genetic causes of male infertility are Klinefelter Syndrome and Y chromosome microdeletion. Although deficiency in many genes have been found to cause subfertility in mice, only a few single gene mutations have been identified in infertile men, reflecting genetic heterogeneity of the disorder. The sex chromosomes are enriched for genes with testis specific or enriched expression. Characterization of these genes shall enhance our understanding of the spermatogenesis process. Our recent characterization of a ubiquitin specific protease USP26 suggests that it plays a dual function in male reproduction. In the testis, it participates in the migration of germ cells along the seminiferous epithelium and services as a cross-talk between the germ cells and the Sertoli cells, whereas on the sperm, it plays a structure role to facilitate the fertilization process.

在忙碌的臨床服務中，談臨床研究與高品質論文撰寫

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近十多年來，實證醫學（evidence-based medicine）對於臨床醫學的發展與應用有著深遠的影響，其已成為從科學研究證據轉變成為臨床醫療指引的一個重要促進工具。在目前醫學知識爆炸的時代，醫師本身有其進修與終身學習的需要。此外，隨著各項生活資訊的發達，民眾對於醫療服務品質的需求，日益增加，而且有越來越多的趨勢要求醫師以實證醫學的方法來照顧病人。因此醫師在其訓練或執業的過程中，必須學會臨床研究的相關方法及其運用，以因應未來以實證為基礎的臨床執業需求。

在教學醫院服務之醫師，除醫療服務外，尚有教學與研究之任務。雖然服務、教學與研究是三大不同類別的工作，然而此三大類別會互相影響，無法完全清楚切割。其實多數醫師對於教學與研究仍有所期待與企圖心，只是沒有機會去體會研究「成功」的感覺，無法持續保持研究的「動力」。由於每個人的研究訓練背景不同，所經歷的研究過程亦不同，因此對於研究工作與論文寫作的體會，人人不同，就好像如人飲水，冷暖自知。以下的經驗分享，就如同野人獻曝般提供大家在忙碌的醫療服務中從事臨床研究與論文撰寫的一些感想。

1. 臨床研究
   1）落實研究基本技能、2）寓研究於服務之中、3）團隊運作設資料庫
   4）整理文獻基本功夫、5）研究主軸範圍更新、6）教學相長收獲更多
2. 論文寫作
   1）痛苦的第一篇文章、2）尋求資源經驗指導、3）先求邏輯再求詞達
   4）反覆審視修改再三、5）時間與作者序分配、6）不怕退稿等待機會

最重要的，還是要您真正去作研究、寫論文，體會成功與失敗的感覺。

【感染防治課程】

性病與愛滋病

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HIV Prevention Tools - Infection Rates

Abstinence
Microbicides
Diaphragm
Female condom
Male condom
Oral Acyclovir
Oral ARV
Male circumcision
Vaccines

Rate during perfect use
Rate during typical use

0 20 40 60 80

Percent of Persons Infected after a Decade of Use

討論的課題

一. 性病與愛滋病之傳染力
二. Microbicidals對防止愛滋病散播之角色
三. Circumcision對防止愛滋病散播之角色

一、性病與愛滋病之傳染力

- STD 是否可增加 HIV 的傳染力與被傳染率
  epidemiological evidence
  biological evidence
- 有效治療 STD 的病患是否可遏止 HIV 的傳播
  Mwanza (Tanzanian) trial
  Rakai (Uganda) trial

STD, according to HIV status

	HIV(+) (n=38)	HIV(-) (n=302)	P value
Disease history			
urethritis	22	140	NS
genital ulcer	24	58	<0.001
Current diagnosis			
urethritis	17	163	NS
genital ulcer	24	138	0.028

NEJM 1988;319:274-8

Stepwise logistic-regression analysis of risk factors for HIV infection in Kenya

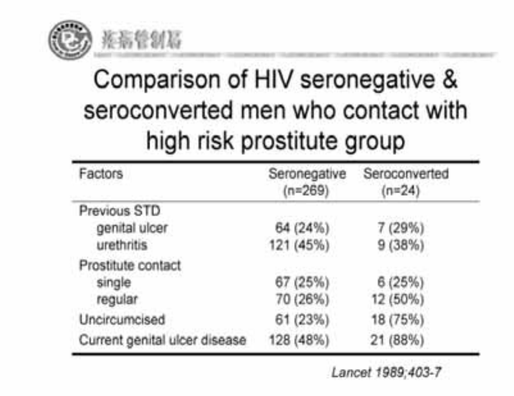
Risk factor	Odds ratio
Travel to neighboring countries	9.00
Regular contact with prostitutes	3.12
Lack of circumcision	
genital ulcer history (-)	5.24
genital ulcer history (+)	8.20
Circumcision and history of genital ulcer	18.17

NEJM 1988;319:274-8

Factors associated with HIV-1 seroconversion in female prostitutes (stepwise logistic regression)

Variable	Adjusted odds ratio
Oral contraceptive use	4.5 (1.4-13.8)
Genital ulcer disease	3.3 (1.2-10.1)
Chlamydia trachomatis	2.7 (0.92-7.8)

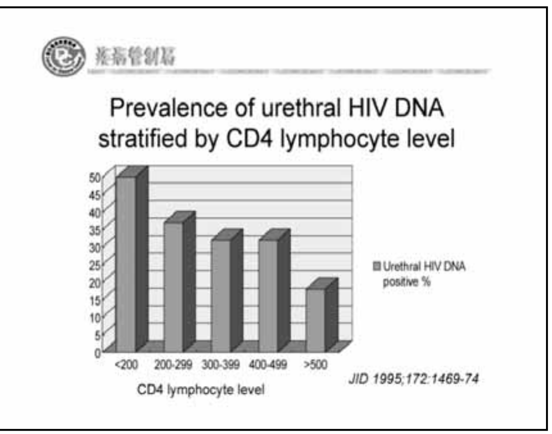
JID1991;163:233-9

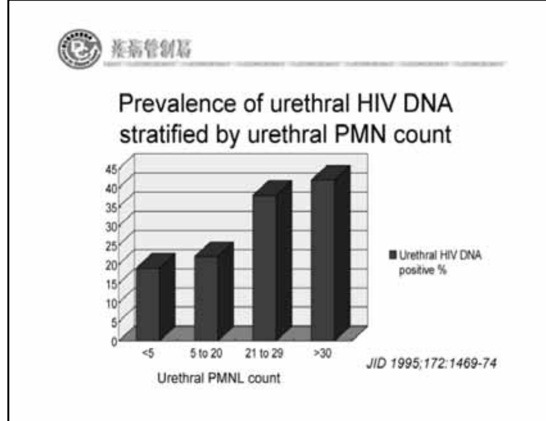


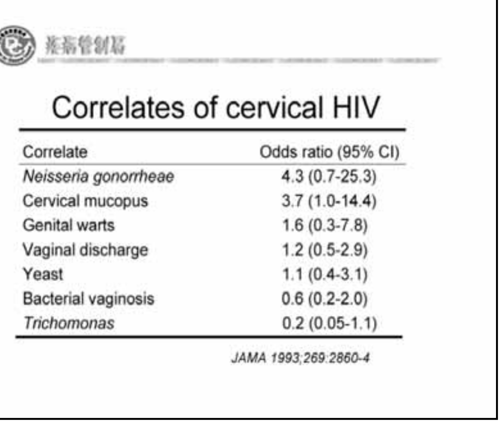
Comparison of HIV seronegative & seroconverted men who contact with high risk prostitute group

Factors	Seronegative (n=269)	Seroconverted (n=24)
Previous STD		
genital ulcer	64 (24%)	7 (29%)
urethritis	121 (45%)	9 (38%)
Prostitute contact		
single	67 (25%)	6 (25%)
regular	70 (26%)	12 (50%)
Uncircumcised	61 (23%)	18 (75%)
Current genital ulcer disease	128 (48%)	21 (88%)

Lancet 1989;403-7



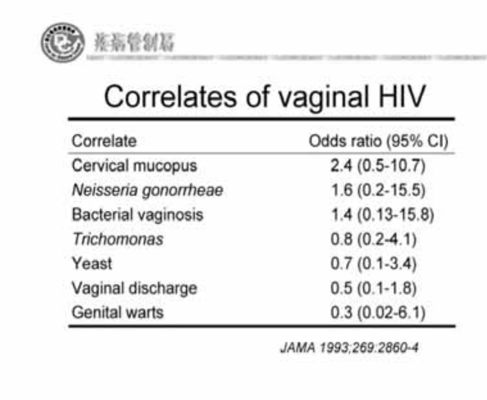




Correlates of cervical HIV

Correlate	Odds ratio (95% CI)
Neisseria gonorrheae	4.3 (0.7-25.3)
Cervical mucopus	3.7 (1.0-14.4)
Genital warts	1.6 (0.3-7.8)
Vaginal discharge	1.2 (0.5-2.9)
Yeast	1.1 (0.4-3.1)
Bacterial vaginosis	0.6 (0.2-2.0)
Trichomonas	0.2 (0.05-1.1)

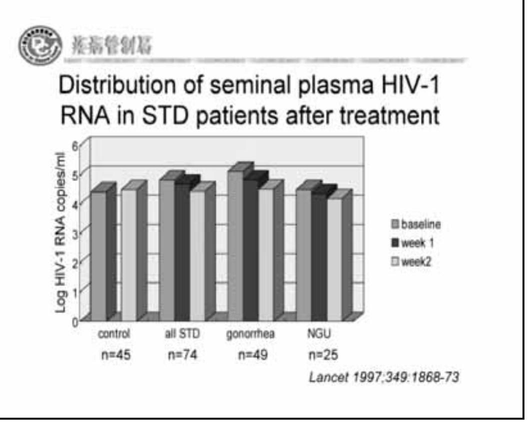
JAMA 1993;269:2860-4



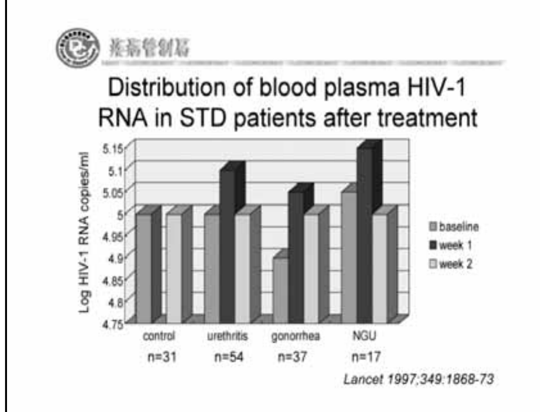
Correlates of vaginal HIV

Correlate	Odds ratio (95% CI)
Cervical mucopus	2.4 (0.5-10.7)
Neisseria gonorrheae	1.6 (0.2-15.5)
Bacterial vaginosis	1.4 (0.13-15.8)
Trichomonas	0.8 (0.2-4.1)
Yeast	0.7 (0.1-3.4)
Vaginal discharge	0.5 (0.1-1.8)
Genital warts	0.3 (0.02-6.1)

JAMA 1993;269:2860-4



Distribution of blood plasma HIV-1 RNA in STD patients after treatment



Lancet 1997;349:1868-73

流行病學與病毒學研究之結論

- 對於男性
  - Active genital ulcer disease可增加HIV感染率 (88% vs 48%)
  - 沒做包皮切除可增加HIV感染率 (75% vs 23%)
- 對於女性
  - Cervicitis可增加HIV感染機會 (OR 2.4-4.3)
- 對於精液中之HIV病毒數
  - Low CD4, high urethral WBC可增加病毒數
  - 治療性病可降低病毒數

How do STIs increase HIV transmission?

- Reducing physical/mechanical barriers (disruption of epithelium)
- Increasing HIV in genital lesions, semen or both (even if VL is undetectable)
- Evoking a more infectious HIV variant
- Increasing the number of receptor cells or the density of receptors per cell

The Mwanza intervention trial：I

- 目的：
  - 提升有症狀性病患者的醫療服務水平，是否可有效減低愛滋病毒的傳播？
- 背景：
  - Mwanza區域位於Tanzania西北方，鄰近維多利亞湖，有主要公路通往首都、肯亞、及中非　目前HIV的盛行率為4%，且在持續上昇中

The Mwanza intervention trial：II

- 實際作法：
  - 選定六組鄉鎮為實驗與對照組
  - 加強地區醫療院所人員對性病診療之專業知識 (training, supervision, monitoring, drug supply)
  - Primary prevention (community education)
  - Screening & treatment of asymptomatic STD (antenatal syphilis)
  - Targeting high risk groups (bar managers, sex workers, community nurses)

Tanzania

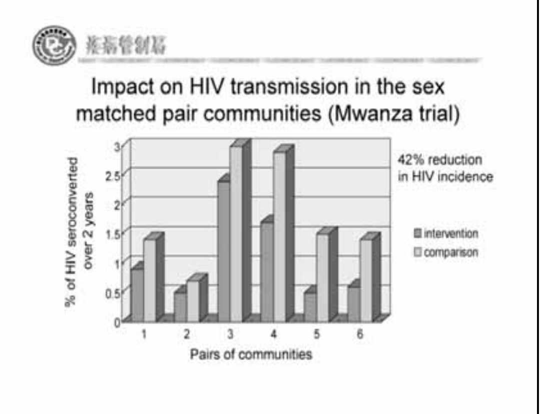
STD treatment strategy

- Mwanza intervention trial
  - syndromatic management of STDs
- Rakai intervention trial
  - intermittent mass treatment for STDs all adults, every 10 months

STD病患對醫療院所滿意度調查 (Mwanza)

Indicators	Male	Female
Examined	70%	78%
Received treatment	100%	100%
Received correct treatment	70%	58%
Received health education	60%	54%
Condoms offered	45%	19%
Satisfied with STD services	86%	81%

Impact on HIV transmission in the sex matched pair communities (Mwanza trial)



Baseline & follow-up prevalence of urethral infections in man (Mwanza trial)

	Baseline (%)		Follow-up (%)	
	Study	Control	Study	Control
Urethritis	10.2	10.7	5.8	7.0
Symptomatic urethritis	1.4	1.8	1.8	3.2
NG/CT infection	2.4	3.2	2.5	3.0
Symptomatic NG/CT	0.44	0.69	1.0	1.5

Effectiveness of partner notification (Mwanza trial)

- Partner notification rate: 30%
  - 99.5%: one partner reported
  - 0.5%: two partners reported
- Reasons for low partner notification
  - embarrassment
  - fear of matrimonial conflict
  - casual nature of sexual relationships
  - failure of health workers to explain

The Rakai intervention trial：I

- 目的：
  - Home-based mass antibiotic treatment，是否可有效減低愛滋病毒的傳播？
- 背景：
  - Rakai區域位於Uganda南方，HIV盛行率為16%，屬於穩定高盛行率的區域

The Rakai intervention trial：II

- 實際作法：
  - 選定五組鄉鎮為實驗與對照組
  - 每十個月，所有15-59歲的成人均接受家訪及azithromycin + ciprofloxacin + metronidazole(實驗組）或維他命 ＋ 打蟲藥(對照組）治療
  - 二十個月以後抽血測 HIV, 並比較發生率

Results of Rakai intervention trial

STD	Study (Round 1)	Control (Round 1)	Study (Round 3)	Control (Round 3)	Impact
Gonorrhea (p)	2.1	1.1	0.8	1.2	NS
Chlamydia (p)	4.0	2.2	2.4	2.6	NS
Syphilis (p)	10.6	9.4	5.6	6.8	S
BV (p)	50	51	47	54	S
Syphilis (i)	1.7	2.2	1.5	1.5	NS
Trichomonas (i)	5.8	10.8	4.1	9.0	S
HIV (i)	1.3	1.3	1.8	1.8	NS

p: prevalence, i: incidence, NS: nonsignificant, S: significant

為什麼會如此？

- 介入措施對HIV高盛行區似乎效果不佳
- 單純藥物介入若不伴隨衛教，效果不易彰顯

Control of STI and HIV prevalence

- Improved case management of STIs in rural Mwanza, Tanzania led to a 42% reduction in HIV incidence over a 2-year period
- Treatment of cervicitis in Mombasa, Kenya, led to a 72% decrease in HIV-1 RNA shedding, thereby reducing infectivity of sero-positive women
- Recent meta-analysis of 4 randomized controlled trials, however, have NOT shown a positive impact of community-based STI treatment on HIV prevalence.
- Further randomized controlled trials are needed to test the effect of alternative STI control strategies

Source: Grosskurth et al 1995; McClelland RS et al, 2001; Wilkinson D et al 2002.

二、Microbicidals對防止愛滋病散播之角色

Why We Need Female Controlled Methods

Biology
- Women are 2-4 times more likely than men to get HIV from unprotected sex

Economics
- Economic need or dependency
- Less able to assert their rights

Social & Cultural
- Gender norms about sexuality
- Gender based violence

Current methods (abstinence, fidelity, and condom use) often require male consent, participation & cooperation

What is a Microbicide?

A substance that can **reduce the transmission of HIV** and other STI pathogens when applied vaginally and, possibly, rectally. **They are not yet available.**

First Generation:
- Gels and creams

In the future:
- Sponges, vaginal rings
- Gels with barrier devices

We Need Microbicides That:

- Are contraceptive *and* non-contraceptive
- Reduce risk of other STIs
- Are safe and non-irritating
- Are inexpensive and available over the counter
- Could be used without partner's cooperation or even awareness

How Could Microbicides Benefit People Living with HIV/AIDS?

- Could reduce risk of co-infection with other HIV strains
- May help protect both partners
- Could reduce risk of other STIs, yeast and bladder infections
- May allow conception while protecting partner

Microbicides & Anal Sex

- Many people (women and men) need microbicides for anal sex
- Creating an effective rectal microbicide is scientifically more complicated
- Vaginal microbicides must be accurately labeled

Image courtesy of www.lifelube.org

How Effective Will Microbicides Be?

First microbicides may be **40-60%** protective

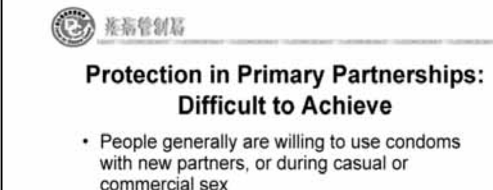
Second generation may be **60-80%**

Promoted as a **back-up** to condoms, not as a replacement.

"Use a microbicide with your condom for added pleasure and protection."

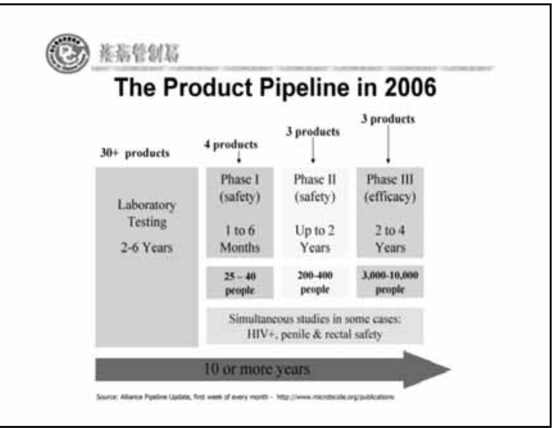
"Use a male or female condom every time you have sex; if you absolutely can't use a condom, use a microbicide."

The Economics of Microbicide Development: A case for

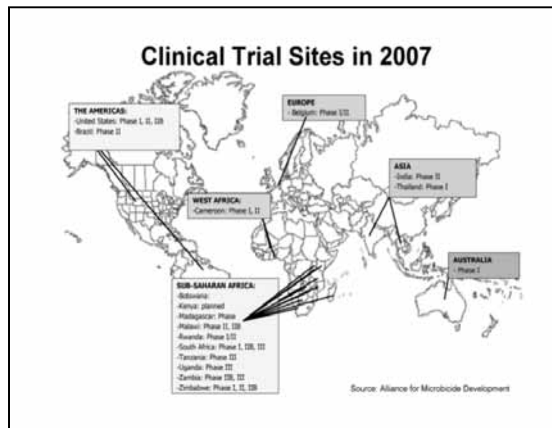


Protection in Primary Partnerships: Difficult to Achieve

- People generally are willing to use condoms with new partners, or during casual or commercial sex
- But once "trust" enters the equation the condom comes off
- Sex with a primary partner is the biggest source of HIV infection among women globally

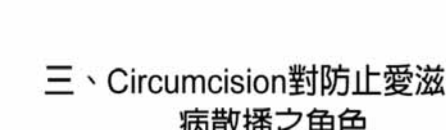


Clinical Trial Sites in 2007

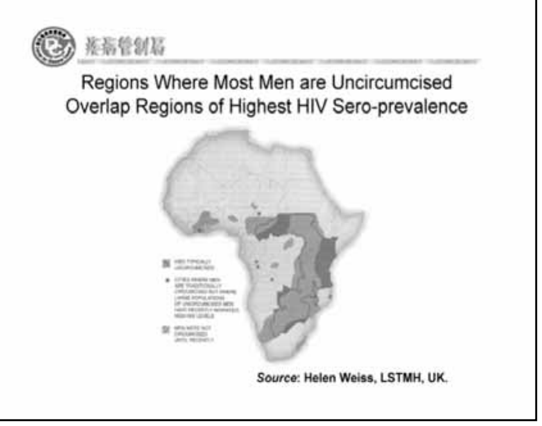


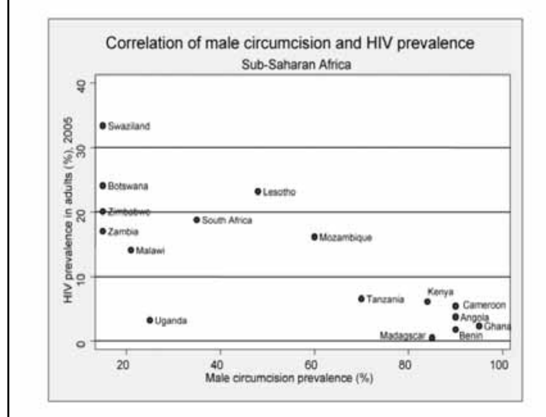
3 Products Furthest Along

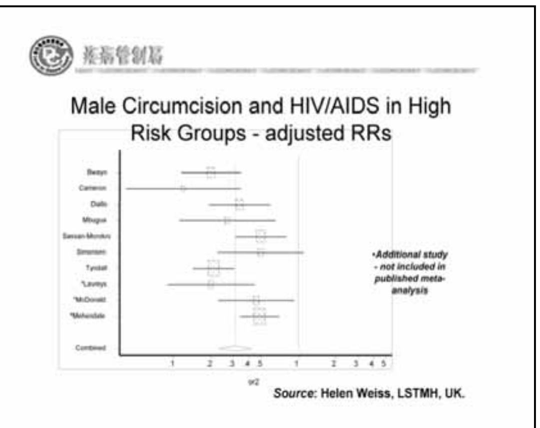
Product Trial sponsor	# women to be enrolled	Location	Preliminary results expected in
Buffer Gel HPTN035-NIH	3,100 women	South Africa, Malawi, Zambia, Zimbabwe and Philadelphia	April 2009
Carraguard Population Council	6,299 women	South Africa – 3 locations	December 2007
PRO2000 (.5%) HPTN035-NIH	3,100 women	South Africa, Malawi, Zambia, Zimbabwe and Philadelphia	April 2009
PRO2000 (.5 and 2%) DFID, MRC	9,763 women	South Africa, Uganda, Zambia, Tanzania	December 2009



三、Circumcision對防止愛滋病散播之角色







HIV Results Summary

Analyses	2-year Incidence* Circ vs Cntl	Protective Effect
Intent-to-Treat	2.1% vs 4.2%	0.53
Modified Intent-to-Treat	1.9% vs 4.1%	0.59
As-Treated		0.55
Modified As-Treated		0.60
Baseline Adjusted	--- Virtually Identical to ITT ---	

* Based on Kaplan-Meier method

Male Circumcision – Biological Plausibility

- Inner mucosa of foreskin is rich in HIV target cells
- External foreskin/shaft keratinized and not vulnerable
- After circumcision, only vulnerable mucosa is urethral meatus
- Moist sub-preputial space increase HIV survival

Male Circumcision (MC)

- **Conclusions**
  - Meta-analysis of 38 observational studies suggest that MC protects against HIV infection
  - Although randomized clinical trials (RCTs) needed to validate this relationship are being conducted in 3 countries, this should not delay the initiation of SAFE (safety, acceptability, feasibility and program effectiveness) studies in selected countries

【醫學倫理課程】

醫院組織倫理

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中國醫藥大學附設醫院一般耳鼻喉科主任

摘要

- 組織倫理
- 醫院組織倫理
  - ⇨醫療專業倫理
  - ⇨臨床倫理
  - ⇨醫療企業與商業倫理
- 企業社會責任

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組織倫理
Organizational Ethics

- Organizational ethics includes both corporate and business ethics. i.e. the corporate values and the financial practices of the organization.
- They relate to all aspects of the organization including mission, vision, governance, and leadership

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醫院組織倫理
Hospital Organizational Ethics

- Business practice related to patient care are conducted in a manner that is honest and proper.
- Encompass organization management with its professional and moral codes.
- Constitutes the behavior interacts with patients, relatives, members of society, providers and staffs.
- In 1996, JCAHO (Joint Commission on the Accreditation of Health Care Organization) began to include accreditation standards.
- JCIA (Joint Commission International Accreditation), Patient & Family Rights

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醫院組織倫理對醫院的價值
What's does organizational ethics mean to a hospital?

- 強化病人的信任
- 塑造良好社會形象
- 增加員工向心力
- 吸引社會資源
- 創新的來源
- 提升競爭力

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醫院組織倫理原則
Principles of organizational ethics

- Duty to individual patient
- Financial incentives
- Quality of care
- Duty to practitioners within the organization
- Due process
- Fairness
- Duty to the community
- Shepherd scarce resources

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醫院組織倫理
Hospital Organizational Ethics

- 醫療專業倫理 Healthcare Professional Ethics
- 臨床倫理 Clinical or Biomedical Ethics
- 醫療企業與商業倫理 Healthcare Corporate and Business Ethics

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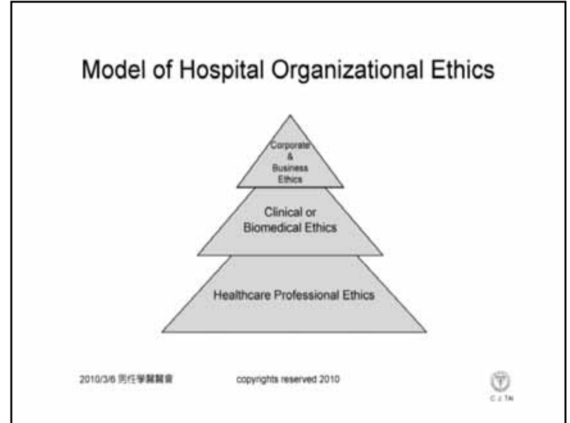
Model of Hospital Organizational Ethics
Corporate & Business Ethics
Clinical or Biomedical Ethics
Healthcare Professional Ethics
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醫療專業倫理
Healthcare Professional Ethics
不傷害原則 (non-maleficence)
利益病患原則 (beneficence)
醫主原則 (medical Paternalism)
自主原則 (autonomy)
誠信原則 (fidelity)
保守秘密 (confidentiality)
告知真相 (veracity)
忠實角色 (role fidelity)
公平正義原則 (justice)
copyrights reserved 2010

臨床倫理
Clinical or Biomedical Ethics
醫學倫理委員會 CEC (Clinical Ethics Committee)
人體試驗委員會 IRB (Institute Review Board)
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醫療企業與商業倫理
Healthcare Corporate and Business Ethics
Establish and clarify the right processes and procedures in order to maintain work of a high ethical quality
Healthcare Business ethics?
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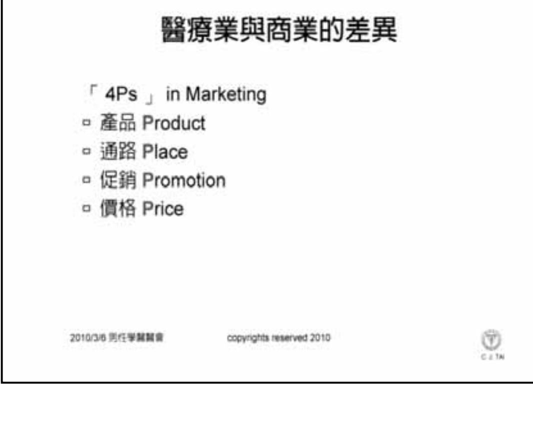
醫療業與商業的差異
「 4Ps 」 in Marketing
產品 Product
通路 Place
促銷 Promotion
價格 Price
copyrights reserved 2010

醫療業與商業之差異
「非營利」或「營利」(for-profit or not-for-profit)
「社會體/公共財」或「經濟體/私有財」(social body / public goods or economic body / private good)
「創造需求」或「滿足需求」(create demand or meet demand)
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醫院的社會責任

Hospital Social Responsibility

- Historically humanitarian in nature
- Healthcare is a social or public good that should be managed to meet the healthcare needs of the community
- Healthcare management professionals' primary responsibilities is to patients and to the community, not to owners or investors (code of ACHE, code of ACHA）

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Clean Profits of Business

「4Ps」 in clean profit

- 無污染 no Pollution
- 愛護人 Cherish People
- 優良產品 Good Product
- 保護隱私 Protect Privacy

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Are CSR important to corporations?

- 好的公共關係 Maintain good public relation
- 增進企業形象 Improve corporate image
- 追求與社區雙營 "Win-Win" with its community
- 企業永續經營 Everlasting business

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企業社會責任

四個層次：

- 減少社會負擔
- 公益與贊助
- 協助解決社會問題
- 創造社會利益與價值

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A code is only the beginning.

- An ethical organization is one in which individual managers and institutional culture encourage, support, and reward conscientious efforts to apply high ethical standards in responding to issues, whether or not the issue is specifically addressed in a code.

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A1

攝護腺癌基因易感性變異對根除性攝護腺切除術後攝護腺特異抗原復發的預後角色

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Prognostic Significance of Prostate Cancer Susceptibility Variants on Prostate-Specific Antigen Recurrence after Radical Prostatectomy

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Background and Objectives: Recent genomewide association studies have identified several prostate cancer susceptibility variants. However, the association between these variants and biochemical failure in prostate cancer patients receiving radical prostatectomy has not been determined.

Materials and Methods: We systematically evaluated 20pro state cancer-associated single-nucleotide polymorphisms in a cohort of 320localized prostate cancer patients receiving radical prostatectomy. Each single-nucleotide polymorphism found to be associated with the recurrence of prostate-specific antigen was further analyzed by Kaplan-Meier analysis and Cox regression model.

Results: Three prostate cancer susceptibility single-nucleotide polymorphisms (rs1447295 at 8q24, rs7920517 and rs10993994 at 10q11) were associated with prostate-specific antigen recurrence ($P < 0.02$). Of these, rs7920517 and rs10993994, which were in strong linkage disequilibrium ($r2 = 0.91$), also showed significant associations with poor prostate-specific antigen-free survival following radical prostatectomy (log-rank test; $P < 0.01$). The associations remained significant in our multivariate Cox proportional hazards analysis after adjusting for other clinicopathologic risk covariates ($P < 0.01$).

Conclusions: In conclusion, loci associated with risk for prostate cancer, such as rs7920517 and rs10993994, might also be used to predict the recurrence of prostate-specific antigen in prostate cancer patients receiving radical prostatectomy.

A2

WNT路徑基因多型性與攝護腺癌術後攝護腺特異抗原復發之相關性

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Association Analysis of the WNT Pathway Genes on Prostate Specific Antigen Recurrence after Radical Prostatectomy

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and Pharmacy, China Medical University, Taichung, Taiwan[11]

Background: Approximately one-third of prostate cancer (PCa) patients show biochemical failure after radical prostatectomy (RP) and are prone to develop metastasis with significant mortality. Although the aberrant Wnt/β-catenin (CTNNB1) signaling has been observed in numerous types of human cancers, including PCa, to our knowledge there is currently no information on the role of Wnt signaling gene polymorphisms in PCa.

Methods: We comprehensively studied the contribution of genetic variations in *CTNNB1* and *adenomatous polyposis coli* (*APC*), one of the key genes encoding the CTNNB1 destruction complex, to PCa risk and prognosis after RP using a hospital-based case-control study. We selected and genotyped 13 tagged single nucleotide polymorphisms (tSNP) to predict common variants across entire *APC* and *CTNNB1* genes in 307 patients with clinically localized PCa who received RP and 371 unaffected controls.

Results.: Four tSNPs (rs3846716, rs2431238, rs41115, and rs565453) and a specific haplotype (GTAAGA) in the *APC* tumor suppressor gene were associated with a 0.57- to 0.71-fold lower risk of localized PCa. The association of tSNPs with prostate specific antigen (PSA) recurrence in PCa patients was then analyzed by Kaplan-Meier analysis and Cox regression model. Interestingly, we found that the *APC* rs3846716 GA/AA genotypes were also significantly associated with poorer PSA-free survival (log-rank test, $P = 0.037$) compared with the GG genotype.

Conclusions: This is the first report documenting the potential prognostic role of the *APC* rs3846716 GA/AA genotype on PSA recurrence after RP.

Synopsis: Only a few indicators are currently used for outcome prediction following curative intended radical prostatectomy (RP). Our results suggest that a simple and preoperative available analysis for *APC* rs3846716 polymorphism might add prognostic value to the outcome prediction after RP.

A3

以攝護腺特定抗原做為侵犯性攝護腺癌患者接受荷爾蒙療法後發生生化惡化的預後因子之研究

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Prostate Specific Antigen as a Prognostic Factor for Biochemical Progression of Advanced Prostate Cancer Patients Receiving Hormone Treatment

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[4] Department of Urology, National Taiwan University Hospital

Objectives: The aim of this study is to identify prognostic factors affecting biochemical progression (BCP) of advanced prostate cancer patients receiving androgen deprivation therapy in Taiwan.

Materials and Methods: A cohort of men diagnosed with prostate adenocarcinoma ever receiving leuprorelin acetate between November 1995 and April 2008 was collected from the computerized registry systems in two medical centers.

Results: A total of 107 eligible patients with newly diagnosed advanced (cT3 above) prostate cancer were assessed for the development of BCP and overall survival. All men had initial serum prostate specific antigen (PSA) measurements. Cox regression model and Kaplan-Meier analysis was used to evaluate the relationship between the clinical parameters and the BCP. A total of 54 patients (50.5%) had BCP during a median 46.1 months' follow-up. In a multivariate analysis, initial serum PSA greater than 105 ng/mL (relative risk [RR], 3.23; 95% confidence interval [CI], 1.66-6.29), pathological bone fracture (RR, 2.73; 95% CI, 1.37-5.44), and hemoglobin 12.7 g/dL or less (RR, 2.05; 95% CI, 1.10-3.81) were prognostic factors of BCP. As compared with those in the lowest tertile, participants in the highest tertile of initial PSA had nearly 3 times the age and body mass index (BMI)-adjusted risk of BCP (RR, 3.16; p for trend <0.009). Further adjustment for hemoglobin and the clinical diseases, the relative risk remained significant; the multivariate RR was 3.68 (p for trend <0.022).

Conclusion: Our data demonstrate that initial serum PSA is a significant risk factor for BCP for Taiwanese advanced prostate cancer patients.

A4

單一醫師施行機器手臂攝護腺根除術 100 例之經驗

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台中榮民總醫院 外科部 泌尿外科 攝護腺防治中心

Experience of First 100 Cases of Robotic-Assisted Radical Prostatectomy (RALP) by A Single Surgeon in Taiwan

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Taichung Veterans General Hospital, Taiwan

Objectives: To analyze the experience of learn curve of robotic-assisted laparoscopic radical prostatectomy (RALP) performed by a single surgeon in Taiwan.

Methods: A retrospective review of 100 consecutive patients who underwent RALP from Dec. 2005 to Oct. 2008. To compare outcomes between patients undergoing first 30 cases (Group I), second 30 cases (Group II) and case 61-100 (Group III) of RALP. We evaluated preoperative, operation and postoperative parameters.

Results: The console time was shorter in Group II and Group III than Group I and less blood loss in Group II and Group III than Group I. The incidence of performing pelvic lymph node dissection was higher Group III than Group I and Group II ($p<0.05$). Significant differences were found in vesicourethral anastomosis time (46.38 min for Group I vs. 31.0 min for Group II vs. 27 min for Group III, $p<0.01$). The incidence of neurovascular bundle preserving was lower in Group III than Group I and Group II (27.5% vs. 53.3%. vs. 46.7 %, $p<0.01$). The positive surgical margin of pT3 was not obviously reduced (86.7% for Group I, 75% for Group II and 66.7% for Group III). The postoperative stay were statistically significant shorter from 7.33 days for Group I to 3.93 days for Group II to 3.07 days for Group III.

Conclusions: Learning curve of RALP showed significantly less vesicourethral anastomosis time and shorter postoperative stay. Selection of decreased the incidence neurovascular bundle preserving in Group III, but the incidence of surgical margin in pT3 prostate cancer was not significantly reduced. Learning curve of decreasing positive surgical margin for tumor control is more than 100 cases of RALP.

A5
單一醫師施行機器手臂攝護腺根除術 200 例併發症之探討

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台中榮民總醫院 外科部 泌尿外科 攝護腺防治中心

Complication of 200 Cases of Robotic-Assisted Radical Prostatectomy (RALP) by A Single Surgeon in Taiwan

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Taichung Veterans General Hospital, Taiwan

Objectives: To analyze the complication of robotic-assisted laparoscopic radical prostatectomy (RALP) performed by a single surgeon in Taiwan.

Methods: A retrospective review of 200 consecutive patients who underwent RALP from Dec. 2005 to Nov. 2009. To compare complication between patients undergoing case 1-50 (Group I), case 51-100 (Group II) , case 101-150 (Group III) and case 151-200 of RALP. We evaluated preoperative and operative parameters and perioperative complication. The complication was classified as Clavien system, grade I: deviate normal post-op course without treatment (ex. Mild lymphocele), grade II: drug or bedside treatment (ex. Gouty arthritis or blood transfusion), grade III: endoscopic or surgical intervention (ex. Vesicourethral stricture with cystoscopic sounding), grade IV: life-threatening problem (ex. Rectourethral fistula) and grade V: death. Major complication was defined as grade III-V.

Results: The console time was gradually shorter from Group I to Group IV ($p<0.05$). Significant less blood loss after every 50 cases of RALP (290 ml in Group I, 178 ml in Group II, 130 ml in Group III and 90 ml in Group IV, $p<0.05$). The incidence of needing blood transfusion was 8%, 4%, 2% and 0% in Group I, II, III and IV respectively. Complication rate was 18%, 12%, 18% and 2% in Group I, II, III and IV respectively. Major complication was 6%, 2%, 4% and 0% in Group I, II, III and IV respectively. Bowel injury was noted in three cases (Group II: 1, Group III:2), one received intraoperative repair without sequelae. Two patients with bowel injury received transient colostomy, repair injury and later closure of colostomy.

Conclusions: Learning curve of every 50 cases of RALP showed significantly less blood loss and less blood transfusion rate. Learning curve of significant decreasing complication is 150 cases of RALP.

A6*

膀胱癌經根除性膀胱攝護腺切除手術尿路上皮腫瘤對攝護腺之侵犯－台北榮總十年之經驗分析

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Prostatic Involvement by Urothelial Carcinoma in Radical Cystoprostatectomy for Bladder Cancer: VGHTPE Experience in 10 years

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Purpose: To evaluate the incidence of prostatic involvement of urothelial carcinoma of urinary bladder (UCP) in radical cystoprostatectomy and the incidence of incidental finding of prostate cancer, and to ascertain variables for prostatic urethral involvement.

Materials and Methods: The bladder and whole-mount prostate sections of 73 radical cystoprostatectomy specimens were reviewed. Stepwise analysis was used to predict UCP.

Results: UCP was present in 20 patients (28.8%). Most bladder tumor were extensive or directly involved the prostatic urethra. Most pathology were non-papillary urothelial carcinoma. Incidental finding of adenocarcinoma of prostate was present in 7 patients (9.59%). Incidental finding of high grade prostatic intraepithelial neoplasia was present in 1 patient (1.37%).

Conclusions: From our series UCP rate was compatible with previous studies. Multifocality is a risk factor of UCP. Otherwise most incidental finding of prostate cancer are clinically insignificant.

A7*

罕見胃癌術後發生攝護腺轉移之個案報告與文獻回故

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Prostate Metastasis from Gastric Adenocarcinoma Following Subtotal Gastrectomy: A Case Report and Literature Review

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In men older than 50 years, primary prostate diseases including benign prostatic hyperplasia and prostate cancer are two most common urologic diseases. Regular prostate specific antigen (PSA) screening and digital rectal examination were often suggested to exclude prostate cancer. Here we reported an unusual case of gastric adenocarcinoma metastasizing to the prostate gland with initial presentations of significant lower urinary tract symptoms and constipation in 7 years following subtotal gastrectomy. In this case, hard consistency of prostate was noted by digital rectal examination, but the PSA level was within normal range. After performing transrectal prostate biopsy, gastric adenocarcinoma metastasizing to the prostate gland was confirmed by histopathological examination. Systemic chemotherapy was arranged for further management. Here we report this unusual case in conjunction with reviewing the literature of distant metastasis to prostate.

C1*

年輕男性的下泌尿道症狀

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Young Men Lower Urinary Tract Symptoms

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Department of Urology, School of Medicine, National Yang-Ming University,
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Purpose: To compare the etiology of lower urinary tract symptoms between <40 year-old male (group 1) and 41~50 year-old male (group 2).

Materials and Methods: We retrospectively collected and analyzed 30 young male patients from May 2006 to Aug 2009 in which 18 (60%) patients in group 1 and 12 (40%) patients in group 2, who visited our Urology Clinic due to lower urinary tract symptoms (LUTS). Those with neurological disease, urethral trauma or stricture were excluded. Evaluations included International Prostate Symptom Score (IPSS), lower abdominal sonography, voiding diary, uroflowmetry (UFR) and urodynamic studys (UDS). And their symptoms and lab data are analyzed in detail.

Results: Mean patient age was 37 (range 21 to 49) and mean symptom duration was 48.3 months. In group 1, the storage and voiding symptoms were 10 (55.6%) and 8 (44.4%) patients respectively. In group 2, these were 6 (50%) and 6 (50%) patients respectively. All patients received UDS with either conventional pressure flow study in 16 (53.3%) patients (7 in group 1 and 9 in group 2) and video-UDS in 14 (46.7%) patients (11 in group 1 and 3 in group 2). In group 1, UDS diagnoses were normal in 1 (5.6%) case, detruosr acontractility / underactivity in 6 (33.3%), primary bladder neck obstruction in 7 (38.9%) and dysfunctional voiding in 4 (22.2%). In group 2, UDS diagnoses were normal in 1 (8.3%), detrusor overactivity in 2 (16.7%), detruosr acontractility / underactivity in 2 (16.7%), primary bladder neck obstruction in 4 (33.3%) and dysfunctional voiding in 3 (25%). In 11 patients with primary bladder neck obstruction, 1 (9.1%) received transurethral incision of bladder neck (TUI of BN) and remained patients took alpha-adrenergic antagonists.

Conclusion: Primary bladder neck obstruction is the most common cause of lower urinary tract symptom among young men with either <40 year-old male (group 1) or 41~50 year-old male (group 2). And UDS is recommended to make an accurate diagnosis.

C2*

三十歲以上接受體檢的男性其下泌尿道症狀及血清中睪固酮之間的相關性

翁文慶 劉詩彬 謝汝敦 余宏政
台大醫院 泌尿部

Correlation of Lower Urinary Tract Symptoms and Serum Testosterone Levels in Men Receiving Health Check Up and Aged 30 and Above

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Purpose: Recently, more and more evidence has shown male lower urinary tract symptoms (LUTS) are related to low serum testosterone levels. Yet, most of the studies were conducted in western country. The current study was designed to investigate the relationships between LUTS and serum testosterone levels in men aged 30 and more who received general health check-up in National Taiwan University Hospital (NTUH) in one year period.

Materials and Methods: From November 2008 to October 2009, 5100 men received health check-up in NTUH. As a routine, the International Prostate Symptom Score (IPSS) was filled and uroflowmetry was performed. Among the men, 1070 wished to measure their serum testosterone levels, so total testosterone and sex hormone binding globulin and (SHBG) were measured and serum free testosterone and bio-available testosterone levels were calculated with as the use of the previously suggested formula. The subjects were divided into 5 groups according to age (30-39, 40-49, 50-59, 60-69, 70-79). Linear regression models were used to determine the relationships between IPSS and the serum testosterone levels.

Results: As the age increased, the IPSS increased. While the serum free and bio-available testosterone levels increased with age, the serum total testosterone did not. There was a weak correlation between the IPSS and serum testosterone levels.

Conclusions: LUTS became severer and some serum testosterone levels became less as the age increased in Taiwanese men. The relationship between male LUTS and serum testosterone levels is not very strong.

C3

血清中的 Dihydrotestosterone 濃度和攝護腺體積有顯著相關性

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Serum Dihydrotestosterone Level had Significant Correlation with Total Prostate Volume

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Objectives: Although age and sex hormones are considered associated with the pathogenesis of prostate enlargement, previous studies of the associations between serum sex hormone levels and prostate volume were inconsistent.

Materials and Methods: 590 men (aged 20-79, mean 54 years) in a health exam were enrolled in the study. The clinical conditions of prostate including digital rectal examination (DRE), serum prostate-specific antigen (PSA), international prostate Symptom score (IPSS), and transrectal ultrasonography (TRUS) were obtained. The serum total testosterone (TT), free testosterone (FT), dihydrotestosterone (DHT), and estradiol (E2) levels were also measured. Spearman's correlation test was used to evaluate the relationships between them, and multivariate linear regression models were then constructed.

Results: Total prostate volume (TPV) correlated positively with age ($r=.364$, $p<0.001$), BMI ($r=0.165$, $p<0.001$), serum PSA ($r=0.446$, $p<0.001$) and DHT levels ($r=0.317$, $p<0.001$), but correlated negatively with serum FT ($r=0.130$, $p=0.001$) and E2 ($r=0.142$, $p<0.001$) levels. The serum TT level did not correlate significantly with TPV. On multivariate linear regression analysis, only age and DHT still correlated significantly with TPV ($p<0.001$, $p=0.019$, respectively)

Conclusions: In contrast to serum TT level had no significant association with TPV, serum DHT level had a significant correlation with TPV after adjusting age and BMI in our study.

C4

中老年男性內源性睪固酮與性荷爾蒙結合球蛋白血清濃度跟脂肪成份關係

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Relationships between Serum Levels of Endogenous Testosterone and Sex-Hormone Binding Globulin with Lipid Profiles in Aging Males

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Objectives: Relationship between serum testosterone (T) levels with lipid profile is still a debate. The objective of this study is to assess the association of free T and sex-hormone binding globulin (SHBG) with serum lipid profiles in men older than 40 years.

Materials and Methods: Community indwelling participants were enrolled from Taipei, Taichung and Kaohsiung city in 2008 and received physical assessment and a blood sampling for determination of total T, free T, SHBG, albumin and lipid profile.

Results: A total of 1,062 participants were enrolled and 857 subjects' data were eligible for analysis with a mean age of 59.0 years. Their mean body mass index (BMI) was 24.8 kg/m^2 and mean total T, free T and SHBG was 520 ng/dl, 8.8 ng/dl and 46 nmol/l, respectively. After adjusted for BMI and age, the TG concentration was significantly inversely related to SHBG (r=-0.217) and FT (r=-0.085), TC was positively correlated to FT (r=-0.086) and HDL was positively correlated to SHBG (r=0.157) and FT (r=0.076). In multivariate analysis with age, BMI, FT, SHBG, TG, DM and fasting status as independent variables, the association of TG, TC and HDL with SHBG or FT remained similar with those assessed by the Pearson correlation coefficients after control of age and BMI. However, some of the associations were modified by the fasting status, DM and BMI. The FT level had a stronger association with TG and HDL concentration in non-fasting status than in fasting status.

Conclusions: Low endogenous FT and SHBG was correlated to unfavorable lipid profiles. In non-fasting status, the associations between FT level and TG or HDL-C concentration became stronger than in fasting status, while this needs further validation.

C5

以 Alfuzosin 治療良性攝護腺肥大對性功能的影響

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Sexuality and Management of Benign Prostatic Hyperplasia with Alfuzosin

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Objective: To assess the effect of alfuzosin (XATRAL®) 10mg once daily on sexual function in men with moderate to severe lower urinary tract symptoms (LUTS) associated with benign prostatic hyperplasia (BPH).

Materials and Methods: This study was an open, non-comparative, multi-centre study. Patients with suggestive symptomatic BPH, IPSS total score $\geq$ 8, with sexual attempts at least once per month were enrolled. All patients received XATRAL 10mg once daily for 24 weeks and were asked to complete IPSS, Male Sexual Health Questionnaire (MSHQ) within 5-visit schedule (baseline and weeks1, 4, 12 and 24). Other assessment included IIEF-5, onset of action and peak urinary flow rate (Qmax).

Results: From Sept 2006 to May 2008, 323 patients were enrolled from 9 centers in Taiwan. Mean age was 59.4±7.9 years old, mean duration of LUTS was 17.0±29.0 months, and mean IPSS bother score was 3.8±1.0. There were 65.2% patients in moderate LUTS group and 34.8% patients in severe LUTS group. After 24-week administration, Alfuzosin 10mg OD had shown to be effective in improving LUTS as well as QoL. Improvement was demonstrated by comparing baseline versus 24th week IPSS; IPSS total score: 17.3 vs. 9.9 ($p<0.001$), bother score: 3.8 vs. 2.5 ($p<0.001$). 85% of patients perceived an improvement of urinary symptom within one month administration. Improvement of sexual function was not significantly demonstrated in whole group (n=323) by comparing baseline versus 24th week parameters. MHSQ total score 89.2±16.3 vs. 92.9±14.8 (p=0.053), IIEF-5 total score 17.5±5.3 vs 18.1±5.5 (p=0.856). However, significant changes were demonstrated in the subgroup of baseline IIEF < 15 (n=84) (MSHQ: 72.6±15.5 vs 81.8±17.1, $p<0.05$; IIEF: 10.3±3.2 vs 14.3±5.1, $p<0.01$). There was no significant change in blood pressure and heart rate comparing baseline to the end of the study.

Conclusion: Within 24-week administration, alfuzosin 10 mg once daily demonstrated improvement of urinary symptom, lower IPSS symptom score and improved QoL. Though the improvement of sexual function was not found in whole group, but significant improvement was observed in the subgroup of IIEF less than 15.

C6

糖尿病和代謝症候群對於下泌尿道功能和勃起功能障礙的初期影響

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The Early Effect of Diabetes and Metabolic Syndrome on Lower Urinary Tract Dysfunction and Erectile Dysfunction

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Objectives: We investigated the association of type 2 diabetes and metabolic syndrome with lower urinary tract symptoms (LUTS) and erectile dysfunction (ED) in Taiwanese men younger than 45 years old.

Materials and Methods: Voiding and erectile function in 226 men with type 2 diabetes at a single diabetes clinic and 183 healthy men with normal fasting blood glucose were compared. Subjects were evaluated using the International Prostate Symptom Score questionnaire (IPSS), five-item version of the International Index of Erectile Function questionnaire (IIEF-5), flow rate and post-void residual urine measurement. The association of metabolic syndrome with LUTS and ED was also evaluated.

Results: The mean age was 38.9 ± 6.1 years (range 20-45) and the mean duration of diabetes was 2.8 ± 3.1 years (range 0.5-20). Compared with controls, men with diabetes had a significantly higher IPSS score (6.1± 5.8 vs 4.1 ± 4.6, p<0.001), an increased of odds ratio of having moderate to severe LUTS (OR=1.78, 95% CI 1.12, 2.84, p=0.01), greater voiding volume (376 ± 177 vs 326 ± 102, p=0.04), worse IIEF-5 score (17.3 ± 6.4 vs 20.0 ± 3.8, p<0.001), an increased of odds ratio of having moderate to severe ED (OR=3.5, 95% CI 2.1, 5.8, p<0.001) but similar maximal flow rate and post-voiding residual. IIEF-5 score was negatively correlated with IPSS score (p=0.0004, coefficient = −0.23, 95% CI−0.35 to −0.11) and HbA1c (p=0.02, coefficient= −0.14, 95% CI −0.26 to −0.01). A total of 156 (69%) patients met the criteria for metabolic syndrome. The mean age, duration of diabetes, HbA1c, IPSS, voided volume, maximal urinary flowrate and IIEF-5 score were similar between diabetic patients with and without metabolic syndrome.

Conclusions: Type 2 diabetes men younger than 45 years old had more LUTS but similar bladder emptying function compared with controls. ED was highly prevalent and was associated with the severity of LUTS. Metabolic syndrome did not aggravate the severity of LUTS, emptying function or erectile dysfunction in early stage of diabetes.

C7

eNOS G894T 基因多型性與勃起功能障礙及前列腺肥大引起之下泌尿症狀之間的相關性

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The Associations among *eNOS* G894T Gene Polymorphism, Erectile Dysfunction, and Benign Prostate Hyperplasia-Related Lower Urinary Tract Symptoms

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Objectives: A number of literature has now identified the role of impaired nitric oxide synthase/nitric oxide pathway in the endothelium as the central to the development of erectile dysfunction (ED) and benign prostate hyperplasia-related lower urinary tract symptoms (BPH/LUTS). Recently a few studies have reported the associations between endothelial nitric oxide synthase (eNOS) G894T gene polymorphisms and ED. However, there has been no report investigating the eNOS G894T genetic susceptibility factor for both ED and BPH/LUTS. The aim of this study is to investigate the possible associations among eNOS G894T polymorphism, ED, and BPH/LUTS in a Taiwanese population.

Materials and Methods: In all, 372 Taiwanese men underwent a free health screening were enrolled. All the men had complete clinical data and questionnaires taken. The *eNOS* G894T polymorphisms were determined using the polymerase chain reaction-restriction fragment length polymorphism method.

Results: Three hundred seventy-two men had a mean (standard deviation) age of 60.2 (8.8) years. With multivariate analysis, our data identified that aging, diabetes mellitus (DM), and eNOS G894T gene polymorphism were three independent common risk factors for both ED and BPH/LUTS ($P < 0.001$, $P = 0.036$, and $P = 0.039$ for ED; $P = 0.034$, $P = 0.004$, and $P = 0.016$ for BPH/LUTS, respectively). The eNOS 894T allele carriers had significantly higher prevalence of ED (77.9% vs. 60.4%, $P = 0.012$) and higher International Prostate Symptom score (IPSS) (13.3 ±10.7 vs. 9.3 ±7.8, $P = 0.001$) than G allele carriers.

Conclusions: Our results showed that aging, DM, and eNOS 894T allele carrier gene polymorphism were the three independently common risk factors for both ED and BPH/LUTS in the Taiwanese population. The eNOS 894T allele carriers had significantly higher frequencies of ED and higher IPSS, suggesting that eNOS G894T gene polymorphisms may play an implication as a genetic susceptibility factor for both ED and BPH/LUTS.

C8

嵌入式口腔黏膜皮瓣：一種全新針對再手術之後尿道整型技術

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Inlay Buccal Mucosal Graft: A Novel Technique for Re-operative Posterior Urethroplasty

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Purpose: To demonstrate a novel technique for re-operative urethroplasty developed in our institute.

Materials and Methods:
Patient selection: Since 2008, a total of four cases with refractory posterior urethral distraction injury were treated with a novel technique in our institute by a single surgeon (Tang SH). The patients who cannot void per urethra after formal urethroplasty and urethrotomies were candidates for this procedure. All patients had previous pelvic fracture and with the associated posterior disruption. The mean length of urethral distraction after injury was 4-5 cm initially. The patients uniformly underwent urethroplasty and many times (mostly over 10 times) of endoscopic urethrotomies before receiving the procedure we reported herein.

Surgical technique: The patient was put in lithotomy position. The membranous urethra was approached transperineally and with a ventral urethrotomy. The urethra was not circumferentially mobilized and not transected. The proximal end of stricture was identified under the assistance of metallic sound via suprapubic cystostomy. The scar between healthy urethras was excised as extensive as possible between 3-9 o'clock directions from the lithotomy view (The "ceiling" was the lower margin of the pubic symphysis). Buccal mucosa graft was harvested from the patient's cheek for the according size to cover the ventral urethral defect. The graft was then fixed to the urethral defect like laying carpet (inlay graft). The Foley catheter was kept for 2-3 weeks after surgery.

Results: All of the 4 patients returned voiding per urethra after surgery. Minor anastomotic stenosis developed in 2 patients and was managed with endoscopic laser vaporization. The postoperative maximal uroflow rates were between 12-15 ml/min in all cases with the follow-up period between 12-24 months. Complications were mostly notably with leg discomfort related to lithotomy position within one month of the surgery.

Conclusion: Re-operative posterior urethroplasty was a challenging procedure for most surgeons. The inlay grafting technique offered successful result for dealing with this situation without further compromising of urethral length, and thus preventing chordee formation.

D1

簡要概述人類陰莖解剖學與勃起生理學的最近進展

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A Brief Overview of Recent Advances in Human Penile Anatomy and Erection Physiology

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Objectives: Deliberation of the human penile anatomy and erection physiology will benefit in treating male sexual dysfunction?

Materials and Methods: Dissecting, light, scanning and transmission electron microscopy, special stains and hemodynamic cavernosometry were used for studying the penile anatomy of human beings, representative quadrupeds and human penile erection physiology when appropriate.

Results: The tunica albuginea of the corpora cavernosa is a bi-layered structure with a complete inner circular layer and an incomplete outer longitudinal coat. The outer cover is absent between the 5 and 7 o'clock positions where two triangular ventral thickenings radiate from the anterior fibers of the bilateral bulbospongiosus respectively. On the dorsal aspect, between the 2 and 10 o'clock positions, the thickening originates from the ischiocavernosus and continues into the distal ligament which serves as a spine within the glans penis. It is equivalent to os penis consistently found in quadrupeds. Evolution of the penile structures from quadrupeds to human is evident because of the same anatomical location and histology. In the corpora cavernosa, skeletal muscle contains and supports smooth muscle. This chamber design meets the requirements for rigid erection. Using normal saline 150 ml/min and 10% colloid 35 ml/min for a cavernosometric study in fresh and defrosted male human cadavers respectively a rigid erection is unexceptionally attainable, in particular venous removal. In the corpus spongiosum, a paper thin tunica albuginea encircles the sinusoids, skeletal muscle partially entraps the smooth muscle in order to allow ejaculation when rigid erection. The deep dorsal vein, a couple of cavernosal veins, and two pairs of para-arterial veins are located between Buck’s fascia and the tunica albuginea.

Conclusions: Results from recent studies exploit new information of penile anatomy and erection physiology that may provide structure-based and physiology development of treatment strategies for remedying male sexual dysfunction.

D2

陰莖靜脈是勃起功能的決定因素：研究解凍大體所獲血流動力學上的證據

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Penile Veins are the Determining Contributor for Erection: The Hemodynamic Evidence from the Study in Defrosted Human Cadavers

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Objectives: Penile venous surgery for treating erectile dysfunction (ED) is currently considered experimentally and the venous factor is not included as a contributor for penile erection. We sought to conduct a hemodynamic study in order to elucidate what the extent is of the actions of penile veins in penile erection, and possibly being an important contributor to impotence.

Materials and Methods: From March to August 2009, six male defrosted human cadavers were used for this study. Using colloid four sets of infusion cavernosometry were carried out with a flow rate of 35.0 ml/min while the intracavernosal pressure (ICP) was recorded before and after the deep dorsal vein (DDV), cavernosal veins (CVs) and para-arterial veins (PAVs) were removed respectively.

Results: The ICP can be reached up to 710 mmHg while a rigid erection was unexceptionally attained in all subjects, lasting significantly longer (p = 0.028) after removal of DDV, CVs, and PAVs respectively. Similarly, there were significant in the maintenance flow at ICP 90mmHg (p = 0.028), T_{max} (p = 0.028), V_{max} (p = 0.028), and pressure loss (p = 0.028). In cadaveric penises, before and after the removal of erection-related veins a rigid erection could be reached at the low flow rate of 35 and 5.5-8.0 ml/min colloid respectively.

Conclusions: We, therefore, concluded that penile vein is categorically the determinant in penile erection since none of the current contributors of penile erection can be expressed in cadavers such as intracavernosal, hormonal, arterial, neurological, drugs effect, chronic systemic diseases, and psychogenic factors.

D3

由生理學觀點著手執行陰莖靜脈截除手術治療勃起功能障礙病患

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A Physiological Approach to a Penile Venous Stripping Surgical Procedure for Patients with Erectile Dysfunction

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Objectives: A refined penile venous stripping surgery has been a viable option for treating erectile dysfunction (ED) in our practice in the past two decades although it may be above consensus. We herein report on a physiological approach for patients with ED secondary to veno-occlusive dysfunction (VOD).

Materials and Methods: From February 2002 to December 2005, 98 patients, who were sexually inadequate and refractory to medical treatment, had a diagnosis of ED secondary to VOD. Of these, 35, 32, and 31 men were respectively assigned to the circumferential, semi-circumferential, and control groups in accordance with receiving penile venous stripping surgery in the first 2 groups via a circumferential or semi-circumferential approach, respectively, and simple follow-up in the last group. After degloving the preputial tissues superficial to Colles' fascia, the confluent channel of the deep dorsal veins (DDV) was identified and enhanced by squeezing the corpora cavernosa 1.5~2.5 cm proximal to the retrocoronal sulcus. It was then thoroughly stripped and ligated with 6-0 nylon sutures with a pull-through maneuver. The cavernosal veins (CVs) were managed in a similar manner. The para-arterial veins (PAVs) were only segmentally ligated. A median longitudinal pubic incision was then made to relay the stripping of the DDVs and CVs proximally to the infrapubic angle. Finally the pubic and circumferential wounds were approximated layer by layer while an assistant consistently stretched the penile shaft.

Results: The operative times were 2.4 ± 0.2 and 3.1 ± 0.4 h respectively. The follow-up period ranged 3.2~7.2 years with an average of 5.4 ± 1.3 years. The operative time, postoperative frenulum edema (3.2 ±1.6 vs. 11.9 ± 2.1 days) and satisfaction rate of surgical course were significantly different ($p<0.01$) in favor of the circumferential approach, although no difference was noted in postoperative infection. Differences in erectile function were significant between the groups of surgery and control in term of preoperative IIEF-5 (9.8 ± 2.3 and 9.6 ±2.1) scores compared to postoperative (21.6 ± 2.5 and 20.8 ± 2.7) ones respectively (both $p<0.001$); however, there was no difference between the 2 surgical approaches. Overall, 90.4% of the surgery group (51/67) reported improvements, whereas some worsening in IIEF-5 scores during the same period of follow-up was noted in the control group.

Conclusions: A circumferential and median longitudinal pubic incision appears to be a valid physiological approach which achieves favorable outcomes with negligible morbidity for treating ED secondary to VOD.

D4

精確的陰莖靜脈截除手術治療勃起功能障礙病患的臨床經驗：手術是否為可行的治療選項？

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Clinical Experience of a Refined Penile Venous Stripping Surgery Procedure for Patients with Erectile Dysfunction: Is It a Viable Option?

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Objectives: Penile venous surgery might not be considered an appropriate treatment for erectile dysfunction (ED) because of disappointing functional outcomes and unacceptable, seemly unavoidable, penile deformity. We report results of a refined penile venous stripping method in patients with veno-occlusive dysfunction (VOD).

Materials and Methods: From 2000 to 2003, 341 of 467 ED males were diagnosed with VOD via cavernosography and Doppler sonography. Patients were excluded from undertaking cavernosography if they had an untreated chronic systemic disease. Patients who underwent the first penile venous surgery in other institutes were also excluded from this study due to the protracted surgical time and unpredictable functional outcomes because severe fibrosis may prevent patients from completing penile venous removal. Of these, 178 men were treated with a refined venous stripping surgical method (surgery group) and 163 patients were treated without this surgery (control group). In the surgery group, 167 were available for long-term follow-up using the abridged five-item version of the International Index of Erectile Function (IIEF-5) scoring system.

Results: The operative time ranged 2.1-5.0 hours. The follow-up period ranged 5.1~8.2 years with an average of 7.7±1.4 years. The difference between the preoperative (9.7±3.9) and postoperative (21.6±2.8) IIEF-5 scores was significant ($p < 0.001$). Overall 90.4% of the surgery group (151/167) reported improvements after surgery. A significant decrease in IIEF-5 scores (10.4±3.8 v.s.7.9±3.2, $p < 0.001$, $n=121$) during the same period of follow-up was, however, noted in the control group.

Conclusions: This refined penile venous stripping surgery delivered favorable results and is a viable alternative for treating VOD.

D5

脂肪幹細胞對高血脂老鼠併發性功能障礙的治療效果

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The Effect of Intracavernous Adipose Derived Stem Cells Injection on Hyperlipidemia-associated Erectile Dysfunction in a Rat Model System

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Objectives: Erectile dysfunction (ED) has been associated with endothelial dysfunction in the corpus cavernosum of humans and animal models. It has been previously demonstrated that adipose-derived stem cell (ADSC) can differentiate into neuron-like, endothelial and smooth muscle cells *in vitro*. In this study, we investigate erectile function and the effect of ADSC therapy in hyperlipidemic rats (HR).

Materials and Methods: Hyperlipidemia was induced in healthy rats by administration of a high fat diet. Subjects received phosphate buffered saline (PBS) or ADSC by intracorporal injection. Physiological variables and serum biochemistry were analyzed to assess the effect of high fat diet. Erectile function was assessed by intracavernous pressure measurement during electrostimulation of the cavernous nerve. Penile histology was assessed using immunohistochemical staining followed by image analysis.

Results: Serum total cholesterol and low-density lipoprotein levels were significantly higher in HR than in normal rats ($p < 0.01$). The high-density lipoprotein level was significantly lower in HR than in normal rats ($p < 0.01$). Mean Intracavernous pressure/mean arterial pressure ratio was significantly lower in the HR+PBS (0.28 ± 0.268) compared to the NR+PBS group (0.84 ± 0.186) and HR+ADSC (0.59 ± 0.312) groups ($p < 0.01$). Control HR had lower neuronal nitric oxide synthase-positive nerve fibers in the penile dorsal nerve and endothelial cells in the corpus cavernosum relative to ADSC treated HR. Smooth muscle content of the corpus cavernosum was significantly higher in both HR groups relative to normal animals ($p = 0.0119$).

Conclusions: Hyperlipidemia is associated with abnormalities in both the nerves and endothelium. Treatment with ADSC ameliorates these adverse effects and holds promise as a potential new therapy for ED.

D6

慢性膀胱阻塞對全身性氧化壓力及陰莖 TGF-beta 的影響

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The Changes of Systemic Oxidative Stress and Penile Transforming Growth Factor beta in Rabbits with Chronic Partial Bladder Outlet Obstruction

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Objectives: Benign prostatic hyperplasia (BPH) is a condition that commonly affects older men and is often associated with lower urinary tract symptoms (LUTS) and erectile dysfunction (ED). The pathophysiology between BPH/LUTS and ED is still unclear. Erectile dysfunction is closely associated with oxidative stress such as diabetic mellitus and smoking. Also, erectile dysfunction resulted from penile fibrosis is found with increased expression of penile transforming growth factor¡Vbeta (TGF-B). The purpose of this study is to investigate systemic oxidative stress and penile TGF-Bin rabbits with chronic partial bladder outlet obstruction (PBOO).

Material and Methods: 16 New Zealand white rabbits were separated into 4 groups: control group and PBOO-treated groups for 2, 4 and 8 weeks (each group had 4 rabbits, n=4). The oxidative stress biomarkers included malondialdehyde (MDA) and total antioxidant capacity (TAC) were assessed in blood plasma at both the beginning and indicated time points of the experimental design. TGF-B was also assessed in penile tissue by Western blot.

Results: There was no significant difference in body weight among rabbits in the four groups. However, there was a significant increase in bladder weight after 2 weeks of obstruction. After 8 weeks of obstruction, there was an additional significant increase in bladder weight in all three groups. In the 4 and 8 weeks groups, there was a significant increase MDA (Fig 1)in plasma, while there was a significant decrease of TAC (Fig 2) in plasma. The expression of TGF-B (Fig 3) was increase in 2 and 4 weeks groups, and further increase in 8 week group.

Conclusions: Rabbits with chronic PBOO showed an increase in systemic oxidative stress and increased expression of penile TGF-B, which could be a novel starting point for examining the link between the BPH/lower urinary tract symptoms (LUTS) and erectile dysfunction in future studies.

D7

單側及雙側電刺激海綿體神經引起大白鼠海綿體內壓增加之比較

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Comparison of the Intracavernous Pressure Increase between Unilateral and Simultaneous Bilateral Electrical Stimulation of Cavernous Nerve in the Rat

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Objectives: To compare the intracavernous pressure (ICP) increase between unilateral and simultaneous bilateral electrical stimulation of cavernous nerve (CN) in the rat.

Materials and Methods: Male adult Sprague-Dawley rats anesthetized with Zoletil and xylazine were used. A 26-gauge needle was inserted into one side corpus cavernosum to measure the ICP on a polygraph. The left and right cavernous nerve was carefully identified, respectively. Three groups of study were executed as following: 1)electrical stimulation of right CN; 2)electrical stimulation of left CN; and 3)simultaneous electrical stimulation of bilateral CN. The electrical stimulation parameters were 1-min train of 2-ms pulses, 20 Hz, 5 - 10 V in each of the above experiments. The ICP before and after electrical stimulation was compared by Wilcoxon signed rank test. The amount of ICP increase after electrical stimulation of right CN, left CN and both CN was compared by Mann-Whitney *U* test. P<0.05 was considered significant.

Results: Electrical stimulation of right CN (5, 7.5, 10 V) elicited a significant increase of ICP from resting 8.0 ± 1.4 to peaked at 67.3 ± 9.5 mmHg (7.5 V). There was a significant increase of ICP from 6.8 ± 0.6 to 56.7 ± 5.8 mmHg (7.5 V) after electrical stimulation of left CN. Simultaneous electrical stimulation of bilateral CN induced a significant increase of ICP from 8.0 ± 0.9 to 73.5 ± 5.0 mmHg (7.5 V). There was no significant difference of the amount of increase in ICP between electrical stimulation of right and left CN (59.3 ± 9.0 mmHg vs. 49.8 ± 5.7 mmHg, 7.5 V). There was no significant difference of the amount of increase in ICP between electrical stimulation of right and bilateral CN (59.3 ± 9.0 mmHg vs. 65.5 ± 4.9 mmHg. There was also no significant difference of the amount of ICP increase between electrical stimulation of left and bilateral CN (49.8 ± 5.7 mmHg vs. 65.5 ± 4.9 mmHg.

Conclusions: The results of this study suggest that there is no significant difference of ICP increase between electrical stimulation of left and right CN in the rat. Furthermore, no significant difference of ICP increase is noted between electrical stimulation of unilateral and simultaneous stimulation of bilateral CN.

D8

勃起功能障礙之性伴侶面對愉悅和不愉悅性經驗時之溝通模式

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How ED Couples Face Pleasant and Unpleasant Sexual Experiences

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Objectives: The purposes of this study are to survey how to communicate between the ED couples when they face pleasant and unpleasant sexual experience and the impact on relationship.

Materials and Methods: The study included ED couples, of whom the males admitted their Erectile Hardness Score (EHS) is grade 3 and the International Index of Erectile Function Score (IIEF) is under 21. This is a self-completion study and the cases are referred from physicians. The study numbers are 100 pairs from north and south Taiwan. Overall satisfaction for sexual experiences included hardness/long lasting erection, intercourse frequency and sexual positions used when faced unpleasant sexual experiences were evaluated. Couple's emotions, attitudes, and communications through language, facial expression, action, and body language when faced unpleasant and pleasant sexual experience were studied.

Results: No matter with unpleasant or pleasant sexual experiences, females were more likely to satisfy than males at different aspects. When faced unpleasant sexual experiences, males (over 50%) were more strongly dissatisfied their hardness and long lasting erection performance than females (less than 40%). Before unpleasant experiences happened, around 40% of participants had at least sex once a week. Less than fourth maintained the same frequency after unpleasant experiences. When faced unpleasant sexual experiences, ED couples considered "missionary position" was the easiest position to achieve than other positions. Over 90% females "expressed happiness and satisfied" in the process and immediately after sex to their husband when she enjoyed a pleasant sexual experience. 69% of females considered to "ask for more sex frequently" and 58% of females "ask for showering together" with their partners immediately after sex. 72% of females had a body language-"hug him / touch his back" in the process and immediately after sex to their husband when she enjoyed a pleasant sexual experience.

Conclusion: Unpleasant sexual experience of ED couples impacts against their relationship.

D9

口服藥治療勃起功能障礙伴侶滿意度

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Couple Satisfaction with the Oral Pharmacotherapy for Erectile Dysfunction

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Objectives: Outcome assessment of treatment for erectile dysfunction (ED) should focus not only the resolution of symptoms but also on overall satisfaction. Satisfaction to ED treatment was in Asian heterosexual couple was rarely investigated. The aim of this study was to assess the couple's satisfaction to therapy of ED with phosphodiesterase-type 5 (PDE-5) inhibitors in outpatient settings.

Materials and Methods: An observational study on ED patients was conducted at two medical centers in Taiwan. An envelope that contained questionnaires for couple was given to outpatient males consecutively who had used PDE-5 inhibitors for treatment of ED for more than 3 months and had stable heterosexual partner for at least 6 months and was returned by mail. The male questionnaire contained demographic data, habit of using PDE-5 I, Erection Hardness Score (EHS) before and after treatment, 5-item Sexual Health Inventory for Men (SHIM) and 11-item Erectile Dysfunction Inventory of Treatment Satisfaction (EDITS)-patient version. The female one contained 5-item EDITS-partner version. The primary outcome measures were the change of EHS, SHIM and EDITS from the couples and their associations with clinical factors. The study was approved by Institutional Review Board.

Results: Mean duration of taking PDE-5 inhibitors was 3 years with sildenafil being the most commonly used agent (70.6%). Compared with EHS 3, subjects with post-treatment EHS 4 had a significantly younger age, younger partner's age, lesser prevalence of comorbidities and higher score of EDITS-patient. The post-treatment EHS had positive correlation with SHIM and EDITS- patient but no correlation with EDITS-female. Of the sample, 95.2% of men had satisfactory treatment, significantly higher than 62.5% of female partner. Patients with satisfactory treatment had a significantly younger age, younger partner's age, higher SHIM score, and higher EHS. The woman's satisfaction was not associated with the variables. Of the 104 couples, 59.6% both sex were satisfied, 35.6% only men and 2.9% only females were satisfied with the treatment.

Conclusions: Continuous treatment of ED with PDE5 inhibitors yielded a high satisfaction rate (95.2%) in patients. Age of the couple and the length of marriage were associated with patient's satisfaction and response to PDE5 inhibitors for ED but not associated with partner's satisfaction. EHS was a simple and reliable tool to assess ED treatment outcome in clinical practice that had positive correlation with patient's satisfaction and SHIM score.

D10

女性性功能障礙個別分項的危險因子分析

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Risk Factors for Individual Domains of Female Sexual Dysfunction

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Objectives: Female sexual function contains four major subtypes of desire, arousal, orgasm and pain. Few studies used validated instruments to determine the dysfunction in these areas and assess their risk factors. The study is to investigate the prevalence of and risk factors for individual components of female sexual dysfunction (FSD) assessed by the 19-item Female Sexual Function Index (FSFI)

Materials and Methods: A self-administered questionnaire containing the FSFI was given to 2,159 female employees of two hospitals in Taiwan to assess their sexual function and its correlates. The associations between FSD in individual domains and potential risk factors were assessed by simple questions.

Results: Among the 1,580 respondents, 930 women's data were eligible for analysis with a mean age of 36.1 years (range 20-67). Of them, 43.8% had FSD in one or more domains, including low desire in 31.3%; low arousal, 18.2%; low lubrication, 4.8%; low orgasmic function, 10.4%; low satisfaction, 7.3%; and sexual pain, 10.5%. Compared with the younger women (20-49 years), the oldest age group (50-67 years) had a significantly higher prevalence in low desire, low arousal, and low lubrication, but not in the other domains. Based on multivariate logistic regression analyses, poor relationship with the partner and perception of partner's sexual dysfunction were major risk factors for low desire, low arousal, low orgasmic function, and low satisfaction. Age and urge urinary incontinence was associated with low lubrication and sexual pain. Most comorbidities were not related to these difficulties, except diabetes being related to low desire.

Conclusions: Relationship factors had substantial impact on female sexual function in desire, arousal, orgasm and satisfaction. On the other hand, women's lubrication problem and sexual pain were related predominantly with biological factors. These are initial results and future research is needed to confirm them.

D11

男性濫用安非他命引起勃起與射精功能障礙

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Erectile and Ejaculatory Dysfunction in Amphetamine Abusers

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Objectives: Amphetamine abuse induces acute and chronic neurotoxic changes in dopaminergic and serotonergic neurons and causes a serious health problem worldwide. This study aims to evaluate the prevalence of erectile dysfunction (ED) and ejaculatory dysfunction (EjD) assessed by validated instruments in amphetamine male abusers and their correlates with psychosocial dimensions.

Materials and Methods: Male amphetamine abusers in a detained center were recruited to complete a self-administered questionnaire containing International Index of Erectile Function (IIEF), Male Sexual Health Questionnaire-Ejaculatory Dysfunction (EjD) Short Form, and a 7-item psychosocial distress. The control group for comparison of ED came from our data bank. The study was approved by Institutional Review Board.

Results: From 2006 to 2009, consecutively a total of 844 amphetamine male abusers signed to complete the questionnaires in the center. After excluding 13 subjects with incomplete data and 26 without sexual activity, 812 subjects' data was eligible for analysis with a mean age of 32.5 years (20-56) and mean duration of amphetamine abuse of 49.0 months (0.1-252). The amphetamine users reported a significantly higher prevalence of ED (36.4 % vs. 20.5 %, $P < 0.05$) with an odds ratio of 2.40 (95% CI: 1.67-3.45) than the controls. The risk of ED increased with the age and duration of abuse. Half of the abusers reported to have decrease in ejaculatory force, volume, and frequency and the prevalence correlated with the duration of abuse after controlled for age. Half of the abusers reported to have psychosocial distress and the level of distress positively correlated with ED and EjD.

Conclusions: Our results supported that abuse of amphetamine was easily associated with ED and EjD that correlated with duration of abuse. Psychosocial distress was common in the abusers and the presence of ED and EjD increased the abusers' distress.

D12

健康狀態與社經因素對台灣中老年男性性生活之影響

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The Impact of Physical Health and Socioeconomic Factors on Sexual Activity in Middle-aged and Elderly Taiwanese Men

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Objectives: Sexual activity in older people has become a topic of growing interest, but few studies have been conducted in Asia because of a more conservative culture. The aim of this study is to evaluate the effect of physical health and socioeconomic factors on the sexual activity of middle-aged and elderly Taiwanese men.

Materials and Methods: From August 2007 to April 2008, a free health screening for men older than 40 years was conducted by a medical center in Kaohsiung, Taiwan. At this screening, participants received detailed physical examination and answered questionnaires that collected demographic and lifestyle information, and medical history as well as answered items from the International Prostate Symptoms Score (IPSS) and five-item version of the International Index of Erectile Function (IIEF-5).

Results: Of the 819 men who participated in this health screening, 744 were included (mean age: 57.4±6.6 years; range: 43-87 years). Overall, 100 (13.4%) participants reported to be sexually inactive in previous six months especially in those over the age of 60, including 24.1% of participants aged 60-69 years and 51.2% of those aged 70 years or older. Older age, lower education levels, loss of a partner, erectile dysfunction, and increased number of comorbidities were found to be independent predictors for sexual inactivity.

Conclusions: Most middle-aged and elderly Taiwanese men remain sexually active. In addition to erectile dysfunction and loss of a partner, lower education levels and increased number of comorbidities were found to be predictors for sexual inactivity. Further research would need to elucidate whether improvement of those factors could help to preserve sexual activity.

E1

雄鼠高泌乳素血症誘發之造精功能異常可能是因為第二型腫瘤壞死因子α 受體之功能增強有關

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Abnormality in Spermatogenesis in Hyperprolactinemic Rats is Related to Hyper-function of Type 2 TNF α Receptors on the Sertoli and Developing Germ Cells

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Objectives: Hyperprolactinemia (hyperPRL) status is related with abnormal spermatogenesis in male rats. Previous studies also showed increased germ cell apoptosis in testis of hyperPRL rats. HyperPRL rats also demonstrated higher TNFα secretion in the testicular interstitium. In this study, we studied on the relationship of TNFα receptors distribution and abnormal spermatogenesis in hyperPRL and control rats.

Materials and Methods: HyperPRL was induced by allo-grafting 2 pairs of anterior pituitary glands (AP) to the left sub-renal capsule. The control rats were grafted with similar amount of cerebral cortex (CX). Six weeks after the grafting, the rats became hyperPRL. The testis of both the AP- and CX-grafted rats were retrieved and fixed in formalin. Immuno-histo-chemical (IHC) studies with antibodies to TNFα receptor type 1 and type 2 were compared in tissues retrieved from both groups. Specific stages of spermatogenesis were categorized for respective comparison. Three blinded investigators give individual scoring on IHC stain.

Results: We noticed that the IHC stain of TNFα receptor type 2 was more significant in germ cells of the AP-grafted rats. While the TNFα receptor type1 showed no particular difference in the 2 groups. The IHC stain was much stronger in the stage 7 to 8 than the other stage in spermatogenesis. Meanwhile, TUNEL staining demonstrated that seminiferous tubules from the AP-grafted groups showed much more apoptotic germ cells than the control groups.

Conclusions: From the findings above we concluded that the germ cell apoptosis demonstrated in the hyperPRL status might due to the activation of TNFα with type2 TNFα receptor in provoking cell death signals in both spermatocytes prior to entering meiosis or spermatids prior to spermiation. As the relationship of hypogonadism of the observed change of distribution of TNFα receptor we need to conduct more detailed experiments to address the implication.

E2

雄鼠高泌乳素血症誘發之睪丸功能低下可以睪丸內給予抗腫瘤壞死因子 α 抗體而矯正之

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Hyperprolactinemia-induced Hypogonadism Can be Reversed by Administrating Anti-TNF α Antibody to the Testis in Male Rats

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Objectives: Hyperprolactinemia (hyperPRL) status is related with hypogonadism in male rats. PRL-induced TNF α secretion from the testicular interstitial cells (TIC) is hypothesized as the underlying cause to impair T release from the Leydig cells (LC). We conducted an in vivo experiment to confirm the role of TNF α in the PRL-related hypo-secretion of T in male rats.

Materials and Methods: HyperPRL was induced by allo-grafting 2 pairs of anterior pituitary glands (AP) to the left sub-renal capsule. The control rats were grafted with similar amount of cerebral cortex (CX). Six weeks after the grafting, the rats became hyperPRL. They were treated by injection of anti-TNF α antibody (ab, 5μg/ml/0.4kg) or phosphate buffer saline (PBS 0.1ml/0.4kg) to the left testicle either 7 or 1 day prior to in vitro experiments. At sacrifice, bilateral testicles were retrieved. From the testicular tissue (both from left and right side respectively) the TIC were isolated, and plated (1 x 10^6 cells) in tubes for in vitro incubation (34C x 1h). Human chorionic gonadotropin (hCG, 0.05 IU) was used as challenge. The T released from the TIC was determined by radioimmunoassay.

Results: We found the T release from TIC of AP-grafted rats was much less than that from the CX-grafted control, either with or without hCG stimulation. However, at the presence of anti-TNF α ab, the T release from AP-grafted rats was paradoxically more significant than that of the control. This phenomenon appeared both in groups that ab injection 1 and 7 days prior to TIC incubation. Interestingly, TIC from either left (ab injection) or right (no injection) showed a similar pattern in T release.

Conclusions: From the findings above we further concluded that hyperPRL-induced hypogonadism is due to the increased responsiveness of testicular interstitial macrophages to PRL by increase their release of TNF α , via which the LC demonstrated decreased reaction to hCG challenge. Administrating anti-TNF α ab can reverse the situation and make the LC from hyperPRL rats demonstrate a superior response to hCG challenge.

E3

有Y染色體微缺損之不孕男性的表現型分析

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The Phenotype Analysis of Infertile Men with Y Chromosome Microdeletions

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Objectives: This study is to analyze the phenotypes of infertile patients with abnormality in Y chromosome microdeletion testing.

Materials and Methods: Infertile patients with azoospermia or severe oligozoospermia (less than 5×10^6/C.C.) are subject to genetic testing according to AUA and ASRM report and EAU guidelines. The genetic testing includes karyotyping and Y chromosome microdeletion testing. The Y chromosome testing is according to the EAA-EMQN protocol for Y microdeletion, besides, AZFc partial deletion was performed according to the protocol of Lin et al (Mol Hum Reprod, 2006). The phenotypes parameters including testis pathology and hormone profiles of these patients were recorded and analyzed.

Results: From Aug. 2006 to Oct. 2009, totally 224 patients received genetic testing, and 47 demonstrated chromosomal abnormalities, including Klinefelter's syndrome, XX male syndrome, inversion, or translocations. While 46 (20.4%) patients showed abnormality in Y chromosome testing. In these patients, 24% were due to AZFc deletion, 2% were AZF a deletion, 8.7% AZF b+c deletion, 65.2% were AZFc partial deletion. The AZFc partial deletion (i.e. gr/gr deletion, b2/b3 deletion etc.) could not be detected from EAA-EMQN protocol. The phenotype of these patients could be further categorized into 3 groups, namely hypergonadotropic hypogonadism, normogonadotropic hypogonadism, or normogonadotropic normogonadism. Testis histology disclosed varied pictures from normal spermatogenesis, hypospermatogenesis, maturation arrest to SCOS or even tubular hyalinization. We noticed that in men with AZFc deletion, normogonadotropic normogonadism correlated with chance of sperm yield. In men with only sY1291 or sY1191 partial deletion, lower FSH showed better chance in sperm yield.

Conclusions: The Y chromosome genetic testing is important in predict the prognosis of treatment of infertile men. While the conventional EAA-EMQN protocol could overlook some other minor deletion in the Y chromosome. The evaluation of gonadotropins adds power in predicting chance of successful sperm retrieval.

E4

纖維母細胞生長因子9為一種睪丸功能之調控因子

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FGF9 Acts as a Local Regulator of Testicular Function

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Objectives: Our previous study showed that FGFR2 is found to be abundantly expressed in Leydig cells and Sertoli cells, suggesting that FGF9 may participate in steroidogenesis and spermatogenesis. This study was conducted to investigate the effects of FGF9 on steroidogenesis and Sertoli cell-mediated germ cell proliferation.

Materials and Methods: Mouse TM4 cells (Sertoli cells) were treated with various doses of FGF9 for 24 hrs, and the culture media, termed FGF9-conditioned medium, were collected and concentrated by using Amicon Ultra-4 centrifugal filter units (Millipore, Billerica, MA).The mouse GC-1 cells (spermatogonia cells) and GC-2 cells (spermatocyte cells) were treated with various doses of FGF-9 conditioned medium for 48 to 96 hrs, followed by determining the cell proliferation rate using CellTiter 96AQueous One solution Cell Proliferation Assay. On the other hand, normal mouse Leydig cell primary culture was treated with various doses of FGF9 and the testosterone levels were determined by radioimmunoassay.

Results: After FGF9-conditioned medium treatment, significant increases in cell proliferations were found in both GC-1 and GC-2 cells in a dose- and time-dependent manner. Additionally, FGF9 could stimulate testosterone production in a dose- and time-dependent manner. Compared to controls, this stimulatory effect reaches 4-fold increase of testosterone levels after 24 hr treatment.

Conclusions: FGF9-treated Sertoli cells are able to stimulate spermatogonia and spermatocyte proliferation, suggesting that FGF9 is involved in germ cell-Sertoli cell interaction. In addition, FGF9 could stimulate Leydig cell steroidogenesis. Collectively, FGF9 is a local regulator of testicular function.

E5*

纖維母細胞生長因子9之起動子變異-712T與賽托利細胞症候群之發生有關

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FGF9 Promoter Variant -712T is Associated with Susceptibility to Sertoli Cell-only Syndrome

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Objectives: Recent studies from *Fgf9* knockout mice emphasized the importance of FGF9 in male sex determination and differentiation. The reproductive system phenotypes of *Fgf9*$^{-/-}$ null mice range from testicular hypoplasia to male-to-female sex reversal and gonadal dysgenesis, suggesting the crucial role for FGF9 signaling in sex determination and testicular development. This study was conducted to examine the sequence variant of FGF9 gene in infertile men with Sertoli cell-only syndrome (SCOS) and to test whether a sequence variant plays a role on SCOS.

Materials and Methods: A total of 29 men with SCOS, 79 unrelated healthy controls were enrolled in this study. To identify the sequence variants in the promoter region, 5′UTR and 3′UTR of the FGF9 gene, the PCR product covering up to 2 kb relative to transcription start site and 3′UTR were generated for DNA sequencing. Luciferase reporter assay was used to study the effect of promoter variant in regulating FGF9 gene expression. Possible transcription factor binding site was predicted by bioinformatics and the interaction between transcription factor and FGF9 gene were examined by ChIP and EMSA studies.

Results: Three genetic polymorphisms were found in the examined population. The identified polymorphisms include a single nucleotide polymorphism (c.-712C>T) in promoter region and a microsatellite motif in the 5′UTR (c.-124dupT (8_10)) and a microsatellite motif in the 3′UTR (c.*275_76TG (13_17)). The allelic and genotypic frequencies of the c.-712C>T in SCOS patients were significantly higher than in controls (P = 0.005 and 0.0008, respectively); whereas, the allelic and genotypic frequencies of the microsatellites c.-124dupT (8_10) and c.*275_76TG (13_17) were not different between the two groups. Promoter variant -712T significantly attenuates promoter activity. E2F-1 is able to bind the FGF9 promoter, and substitutional mutation of E2F-1 binding site (-712C>T) within FGF9 promoter region reduces the DNA-protein complex formation.

Conclusions: Promoter variant -712T may result in decreased FGF9 expression and contribute to one of the causes of SCOS. This is the first report of sex determining gene sequence variant affecting germ cell sex determination machinery in the absence of somatic sex reversal.

E6

能在家中測量活動精子數的新式儀器－只有皮夾般大小的原型機介紹以及其測量結果與傳統測量方法結果的相關性

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A Novel Device for Testing Motile Sperm at Home - A Wallet-sized Prototype and Its Correlation with Traditional Sperm Tests

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Objectives: As male infertility being prevalent resulting from many etiologies, careful and close surveillance for sperm quality is needed. However, traditional non-home used sperm tests are bothersome and embarrassing, so an easier and objective means for sperm analysis at-home is highly demanded. This study presents a wallet-sized motile sperm counter and its correlation with traditional tests.

Materials and Methods: Human semen was collected from clinical-indicated patients at urological OPD of NTUH and then tested by this wallet-sized prototype, microscope and Sperm Quality Analyzer (SQA IIB) respectively. Motile sperm counts measured by this device were compared with the results of microscope and SQA.

Results: Good correlation was discovered for motile sperm count results between this device, microscope and SQA.

Conclusion: This wallet-sized motile sperm counter could measure motile sperm count to an extent and its design was also suitable for home use.

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貯精囊核磁共振是先天無輸精管病人最好的影像診斷

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Seminal Vesicle MRI as the Best Image Diagnosis for the Congenital Absence of Vas Deferense

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先天無輸精管病人（CAVD）已知和纖維囊腫（CF）的先天疾病有關，也是 CFTR 基因突變所導致的結果，然而為什麼會造成輸精管缺損，機轉仍未明瞭，與輸精管同一胚胎學的來源的貯精囊會有什麼變化，也缺乏完整的分析。我們曾對所收集的 CBAVD 病人做貯精囊的研究，以經直腸超音波來觀察，發現貯精囊有多樣的變化，包括雙側或單側發育不全（hypoplasia）或缺損（Agenesis），並且和其基因突變性不相契合。

改良過磁核共振機器可以不經特殊的 Rectal Coil，對男人貯精囊做多面向的掃描和構圖，不僅可看到兩側貯精囊的大小、發育和內含物，甚至看到和輸精管的相關連。本研究選取 10 位單側或雙側無輸精管的病人，並以假設為正常貯精囊發育的精血症病人作為正對比，也選取假設內生殖器未全發育的 Kallmann's 症候群病人作為負對比，來分析這 10 位病人貯精囊的大小、發育和型態，與經直腸超音波的圖像做比對，結果發現貯精囊磁核共振能提供更精確的影像診斷，來分析 CAVD 病人貯精囊的多樣性，比經直腸超音波對病人的侵害性更小。我們將做更多的病人個案分析，相信對解開造成 CAVD 機轉研究會有所貢獻。

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陰囊癌肉瘤ㄧ個案報告及文獻回顧

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Carcinosarcoma of Scrotum: A case Report and Literature Review

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Introduction: Carcinosarcoma is an uncommon neoplasm in which both epithelial and mesenchymal components are malignant. It can be encountered in various locations. Carcinosarcoma over perineal area was very rare. Herein, we presented a patient with carcinosarcoma of scrotum.

Case report: This 59 y/o male has no known past history and was quite robust before. Skin ulcer over his perineal area has been noted for over two decades and he never sought for medical advices. He noted a painless nodule between his scrotum and anus in early January this year, and he paid no attention to it. The mass grew with time, sometimes he felt pain, and occasional bleeding bothered him. He used some OTC ointment but discomfort persisted. It grew into a big pedunculated fungating mass with size 5*5*5 cm, with local tenderness, swelling, and bleeding after abrasion. He finally visited our OPD on 980928. Pelvic CT was arranged and showed a mass over perineum with central necrosis. He was then admitted and underwent wide excision of perineal tumor on September, 11th, 2009. Postoperative course was uneventful. He was now regularly followed at our outpatient department and no local recurrence has been noted until now.

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