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ESSM NEWSLETTER

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IMPRINT

Publisher: ESSM

Editor-in-Chief: Juan I. Martinez-Salamanca

Layout: CPO HANSER SERVICE

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Welcome Address

I am delighted to welcome you to this 2016 Issue of the ESSM newsletter. We have in our society great things coming soon.

We are very excited having next ESSM Meeting in Madrid, my home city, would be a big pleasure and honor to host you along with my mentor and friend Ignacio Moncada, on behalf of the Spanish Association of Andrology & Reproductive Medicine (ASESA). Our ESSM Scientific Committee, leader by Maarten Albersen, did a great job to built an outstanding program including two exciting live surgeries sessions.

We encourage you to come to Madrid, and enjoy a great meeting along with a fantastic city, food, nightlife, history and more important, amazing people.

In this issue, we have included an interesting interview with a world-class expert in Sexual Medicine, Dr. M. Khera. We cover main relevant publications both Clinical and Basic by my Associated Editors and upcoming Events (Dr. Mondaini, Angulo & Vozmediano).

Also, we add two very interesting Keys from Kols collaborations regarding Peyronie's disease & Treatment of Hypogonadal Male, by Dr. Hatzichristodoulou and Dr. McCullough respectively.

I hope you will enjoy reading it.

Finally, I would like to thank you all for your continued support of our society and I look forward to seeing you in Madrid very soon.

My very best
Juan I. Martínez-Salamanca



Interview with Dr. Mohit Khera – Ten Questions

by Juan I. Martínez-Salamanca



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Dr. Khera is an internationally known figure and world-class leader in the field of Sexual Medicine. He is an outstanding contributor to the field of sexual medicine as a researcher, patient advocate, educator, innovator and author. Dr. Khera clinical interest areas include Testosterone in Aging Men, Male Reproductive Medicine and Sexual Wellness. Mohit Khera, M.D., M.B.A., M.P.H., Associate Professor, is the Director of the Laboratory for Andrology Research at McNair Medical Institute, Baylor College of Medicine. He is also the Medical Director of the Executive Health Program at Baylor. Dr. Khera is a Board-certified urologist specializing in male infertility, male and female sexual dysfunction, and declining testosterone levels in aging men.

Having you here it is a real pleasure and honor not only for me but also for all ESSM Members.

JIMS: Dr. Khera could you make us a brief journey throughout your professional background?

I graduated college from Vanderbilt University in 1993 with a strong interest in business. I then went to Boston University where I completed my Masters in Business Administration (MBA) and my Masters in Public Health (MPH). I worked as a health care analyst for 2 years in Boston when I then decided I wanted to become a physician. I then went to the University of Texas where I achieved my MD degree in 2000. I then completed my urology residency at Baylor College of Medicine in 2006. Finally I completed my fellowship in Male Reproductive Medicine and Surgery with Dr. Larry Lipshultz in 2007. I then

joined the faculty at Baylor College of Medicine where I currently an Associate Professor with a strong clinic and basic science research interest in sexual medicine and andrology.

JIMS: During your dilated career, which has led to the passage from “Andrology” to Sexual Medicine”, and what do you prefer “Sexual Medicine” or “Men’s Health”?

Sexual Medicine and Men's Health are integrally related. Declining Men's Health conditions lead to sexual dysfunction. Improving a man's overall health actually improves his sexual function. I believe that if you treat sexual dysfunction in men you should also be knowledgeable about how to treat common men's health conditions.

JIMS: What do you think the role of the urologist should be in the management of Male Infertility? And what are our major challenges?

Urologists should be the leaders in the diagnosis and management of Male Infertility. Urologists are not only knowledgeable and familiar with the male reproductive tract, but they are also trained on how to operate and perform common male infertility procedures, such as sperm retrieval, varicocele, and even vasectomy reversal. The challenges are developing close relationships with Reproductive Endocrinologists and IVF centers so that these patients can be referred and managed appropriately. In addition, many residencies do not adequately train urologists on how to perform an epididymovasostomy or even a vasovasostomy. Many urologists are thus forced to learn these procedures on their own which can be challenging.

JIMS: Dr. Khera, if you were not a urologist, what would you be?

That is an easy question. I would be a professional tennis player. I am passionate about tennis and play 3–4 days per week. It is an amazing sport and I commonly play doubles tennis with my 3 children.

JIMS: In the field of Peyronie's Disease, what do you think are the main challenges to achieve? What is your experience with the use of Xiaflex?

The medical management of Peyronie's can be challenging in the fact that it does require a commitment from both the patient and the physician. Xiaflex is an excellent medication but realize that it improves curvature by approximately 40 percent. Xiaflex is typically a 3 month process involving 8 injections. The challenges with a penile plication is the loss of penile length. The greater the curvature, the greater the loss in penile length. Many times I will initiate Xiaflex injection in a patient and reduce their curvature and then perform a penile plication. I refer to this as “priming” for surgery as this process mitigates the overall loss in penile length size after plication and I believe it improves overall patient satisfaction. Finally, the main concern with excision or incision and grafting procedures is the development of erectile dysfunction and penile numbness. Patients have to be counselled appropriately before performing any of these procedures.

JIMS: Dr. Khera, what do you most often wish you could stay to patients, but didn't?

I have always taken a straightforward approach and tend to be very honest with my opinions with patients. I believe that good communication improves patient care.

JIMS: What is the most rewarding aspect of being a doctor?

I believe Urology and more specifically the field of sexual medicine is the most fascinating and rewarding field of medicine. There are a tre-

Interview with Dr. Mohit Khara

mendous amount of research opportunities in this field. More specifically, there are many opportunities for translational research which can be very rewarding. I am passionate about taking care of my patients as well as my basic science and clinical research and it makes coming to work extremely enjoyable.

JIMS: Dr. Khara, regarding the latest controversy about Testosterone Replacement Therapy & Cardiovascular Risk, what is your personal opinion about that?

Ten years ago the number one safety concern with testosterone was prostate cancer. Today the number one safety concern with testosterone is cardiovascular disease. For decades we have had excellent data supporting testosterone's beneficial effects on the heart. In 2006, Shores et al demonstrated that those men with lower testosterone levels were much more likely to die at an early age. Numerous later prospective studies also found that men with lower serum testosterone values were much more likely to die. Many of these studies found that the cause of death in these hypogonadal men was primarily cardiovascular in origin.

It was in 2010 with the Basaria study, and then in 2013 with the Vigen and Xu studies, and finally in 2014 with the Finkel study that there were some concerns with testosterone and its potential role in causing cardiovascular events. I believe there are significant limitations with these studies. In fact, many studies after 2014 have demonstrated once again no increased risk of cardiovascular events in men using testosterone therapy. Currently the FDA has issued a warning on the use of testosterone and the potential risk of a cardiovascular event. I do believe that we should counsel our patients that this warning does exist and that there are inconsistencies with the literature and more studies are needed.

JIMS: What is your most important piece of advice for doctors just starting out?

The advice I received when I first started my practice was to follow the 3 "As". Always be available, have a great attitude, and make sure you are always improving your aptitude. One should never lose focus for why they have entered the field of medicine and most importantly they should enjoy what you do.

JIMS: And last but not least, which do you consider the most important challenges for our specialty (Sexual Medicine) and for our society (ESSM) in the next 5 years?

In the next 5 years I believe there will be a shift in our treatment paradigm for erectile dysfunction. ED is progressive disease that will affect almost every man if they live long enough. Currently our treatment options take a reactive approach and do not treat the disease process itself. I believe that disease modification and preventive therapies are the future of ED treatments. Future therapies such as stem cells, PRP, and even shock wave may improve and potentially reverse the ED disease process. Other therapies such as diet and exercise, use of statins and use of daily PDE5i are other examples of modifying the ED disease process. I believe that we must think of ED as a progressive disease and develop strategies to reverse this process.

It was a great pleasure to interview you; I am convinced that your points of view, fruits of a lifetime devoted to your work, will be highly appreciated by our readers. Thanks once again.



EUROPEAN SOCIETY
FOR SEXUAL MEDICINE



18th CONGRESS OF THE EUROPEAN SOCIETY FOR SEXUAL MEDICINE

4 – 6 February 2016 | Madrid, Spain

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Have you read? Best of the Best: Clinical

A brief summary of the best papers and abstracts published in the main journals related to Sexual Medicine by **Nicola Mondaini**



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Erectile dysfunction

Malavige LS et al: The association between physical activity and sexual dysfunction in patients with diabetes mellitus of European and South Asian origin: The Oxford Sexual Dysfunction Study. Eur J Med Res. 2015 Nov 5;20(1):90.

The present study aims to evaluate the relationship between physical activity and sexual dysfunction amongst an ethnic South Asian population living in the United Kingdom and compare the association with that of the native Caucasian population.

Twenty-five general practitioner clinics from eight primary care trusts in the United Kingdom collaborated in the Oxford Sexual Dysfunction Study. In each practice, a sample of diabetic and non-diabetic patients of European/Europid and South Asian origin were invited for the study. Erectile dysfunction (ED) was assessed using a five-item version of the International Index of Erectile Function. Premature ejaculation (PE) was diagnosed using the premature ejaculation diagnostic tool. Libido was assessed by asking participants to grade their desire for sexual activity. Physical activity during the past week was assessed using the short version of the International Physical Activity Questionnaire (IPAQ). A binary logistic regression analysis was performed in all adults, Europids and South Asians with 'presence of ED' as the dichotomous dependent variable (0 = ED absent; 1 = ED present) and age, diabetes status, physical activity, ethnicity, current smoking and use of antihypertensive medications as the independent variables.

Sample size was 510, and mean age was 56.9 ± 9.7 years. There were 63.9% (n = 326) Europid males in the study population. The prevalence of

ED was 64.5% and it was significantly higher in men with diabetes than in those without diabetes (84.4 vs. 49.0%, $p < 0.001$). The overall prevalence of PE was 28.8%, (with diabetes 32.6%, without diabetes 25.8 %; $p = 0.109$). Reduced libido was reported by 26.9 % of study participants (with diabetes 32.8%, without diabetes 22.0%; $p < 0.01$). The median (IQR) total physical activity of the study population was 2373 (3612) MET-min/week. In the IPAQ categorical score, 36.8% (n = 184/434) males were 'highly active', and 17.8 % (n = 89/434) were 'inactive'. In all adults, age (OR: 1.06), South Asian ethnicity (OR: 1.40), physical inactivity (OR: 1.62) and presence of diabetes (OR: 3.90) all were associated with significantly increased risk of developing ED. A similar result was observed in Europids but not in South Asians.

Erectile dysfunction was associated with physical inactivity, mainly in Europid males, irrespective of diabetes status. This association was not observed in South Asian males with or without diabetes.

Rastrelli G et al: The role of prolactin in andrology: What is new? Rev Endocr Metab Disord. 2015 Nov 5

Prolactin (PRL) has been long deemed as a hormone involved only in female reproduction. However, PRL is a surprising hormone and, since its identification in the 1970s, its attributed functions have greatly increased. However, its specific role in male health is still widely unknown. Recently, low PRL has been associated with reduced ejaculate and seminal vesicle volume in infertile subjects. In addition, in men consulting for sexual dysfunction, hypoprolactinemia has been associated with erectile dysfunction and premature ejaculation, findings further confirmed in the general European population and infertile men. Several metabolic derangements, recapitulating metabolic syndrome, have also been associated with low PRL both in men with sexual dysfunction and from the general European population. In men with sexual dysfunction, followed-up for more than 4 years, low PRL was identified as an

independent predictor of the incidence of major adverse cardiovascular events. Finally, an association with anxiety or depressive symptoms has been found in men with sexual dysfunction and from the general European population. While a direct role for impaired PRL function in the pathogenesis of these reproductive, sexual, metabolic and psychological disorders is conceivable, the possibility that low PRL is a mirror of an increased dopaminergic or a decreased serotonergic tone cannot be ruled-out. Hyperactivity of the dopaminergic system can explain only a few of the aforementioned findings, whereas a hypo-serotonergic tone fits well with the clinical features associated with low PRL, and there is significant evidence supporting the hypothesis that PRL could be a mirror of serotonin in the brain.

Fode M et al: Erectile function after radical prostatectomy: Do patients return to baseline? Scand J Urol. 2015 Nov 5:1-4.

The aim of this study was to assess postprostatectomy erectile function compared to preoperative status by subjective patient perception and the abbreviated International Index of Erectile Function (IIEF-5) questionnaire.

The study used data from a prospectively collected database and a cross-sectional, questionnaire-based study in patients following radical prostatectomy. Erectile function was assessed with the IIEF-5 and the question "Is your erectile function as good as before the surgery (yes/no)". Patients were included if they were sexually active before surgery and had at least 1 year of follow-up. The main outcome measure was the proportion of patients returning to self-perceived baseline erectile function. Secondary outcome measures included the proportion of patients returning to baseline erectile function according to the IIEF-5 and predictors of return to baseline function. Questionnaires from 210 patients were available. Overall, 14 patients (6.7%) reported that their erections were as good as before surgery. Bilateral nerve-sparing was the only significant predictor of a return to baseline erectile function ($p = 0.004$). Forty-three patients (20.5%),

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who did not report use of erectile aids, showed no decline in IIEF-5 score. When including patients who used erectogenic aids, 69 (32.9%) maintained their preoperative IIEF-5 score. On multivariate analysis a low preoperative IIEF-5 score was a significant predictor of return to baseline IIEF-5 score ($p < 0.0001$).

Return to subjective baseline erectile function following radical prostatectomy is rare. The IIEF-5 questionnaire may not adequately reflect patients' experience. This should be considered in preoperative patient counselling.

Penile surgery

Henry GD et al: The Who, How, and What of Real-World Penile Implants Patients in 2015: The Propper (Prospective Registry of Outcomes with Penile Prosthesis for Erectile Restoration). Registry Baseline Data. J Urol. 2015 Aug 17.

Heretofore, the published data on penile implant patients consisted generally of small series of single-surgeon, retrospective experiences rather than prospective or large, multicenter evaluations. This study establishes a baseline of data collection from PROPPER (Prospective Registry of Outcomes with Penile Prosthesis for Erectile Restoration). PROPPER is the first large, prospective, multicenter, multinational, monitored, and internal review board (IRB)-approved study of real-world outcomes for penile implant patients. Data from the PROPPER study was examined to determine patient baseline characteristics and primary and secondary etiologies prior to ED treatment, to include: Type and size of implant received; surgical steps/techniques utilized during implantation; and duration of hospital stay.

Through April 2, 2015, a total of 1019 patients were enrolled in the study at 11 sites, with radical prostatectomy (RP) being the predominant etiology in 285 (28%) subjects. Of those 285 RP patients, 280 (98.2%) received an AMS 700. Of these patients, 65.0% (182/280) had placement of the reservoir in the traditional retropubic space, versus 31.8% (89/280) in a

submuscular location. For those non-RP patients receiving an AMS 700, less patients underwent reservoir placement in the submuscular location (17.7% (124/702), versus 80.9% (568/702), p -value: < 0.001). For those patients receiving an AMS 700, RP and diabetic patients had more outpatient admissions (< 24 hours) (56.8% and 52.1%) compared with cardiovascular and Peyronie's disease patients (42.0% and 35.6%, p -value: < 0.001). This first-of-its-kind, large, prospective, multi-center study reveals most penile implant patients in North America receive an IPP and that RP is the most common primary etiology of penile implant surgery. Moreover, RP patients were more likely to have the reservoir placed in a submuscular location, experience longer OR time, and be admitted overnight as compared with other patient groups

FSD

Maseroli E et al: Bringing the body of the iceberg to the surface: The Female Sexual Dysfunction Index-6 (FSDI-6) in the screening of female sexual dysfunction. Endocrinol Invest. 2015 Sep 3.

Female Sexual Dysfunction (FSD) is a still poorly studied and underdiagnosed condition. The aim of the study was to produce an improved version of FSFI-6 (6-Item Version of the Female Sexual Function Index), entitled Female Sexual Dysfunction Index-6 (FSDI-6), and to estimate its accuracy as a screening instrument for FSD. In the new version, an item related to the personal interest in having a satisfying sex life was added, while the item rating the entity of sexual arousal was removed. We administered FSDI-6 in a consecutive series of female adult patients not consulting for sexual problems ($n = 120$, Cohort 1), and in another series of patients specifically consulting for sexual problems, which were considered as the control group ($n = 160$, Cohort 2).

FSDI-6 score was significantly higher in patients in Cohort 2 ($p < 0.0001$). Cronbach's alpha for FSDI-6 was 0.784, indicating a high level of reliability. The estimated area under the ROC curve for FSDI-6 was 0.657 ($p < 0.0001$, 95%

CI 0.584-0.730). The proportion of subjects with a pathological FSDI-6 score (≥ 16.5) was 29.9 ($n = 32$) and 59.4% ($n = 95$) in Cohort 1 and 2, respectively ($p < 0.0001$). Among subjects with a pathological FSDI-6 (score ≥ 16.5), those consulting for FSD had been postmenopausal for fewer years, had a higher level of education, a lower BMI and a lower prevalence of chronic diseases than those not consulting for FSD ($p < 0.05$).

Although a lower educational level, overweight/obesity, menopause and chronic diseases are risk factors for FSD, they are often associated with the failure in medical consultation for FSD. We propose that FSDI-6 should be performed by health care providers in non-specialist settings to detect potential FSD, which otherwise could remain under-diagnosed.

Fertility

Vassilakopoulou M et al: Anticancer treatment and fertility: Effect of therapeutic modalities on reproductive system and functions. Crit Rev Oncol Hematol. 2015 Aug 8.

The significant improvement of cancer treatments entailed a longer life in cancer survivors and raised expectations for higher quality of life with minimized long-term toxicity. Infertility and gonadal dysfunction are adverse effects of anticancer therapy or may be related to specific tumors. In female cancer survivors, premature ovarian failure is common after antineoplastic treatments resulting in infertility and other morbidities related to oestrogen deficiency such as osteoporosis. In male cancer survivors, infertility and persistent azoospermia is a more common long-term adverse effect than hypogonadism because germ cells are more sensitive to chemotherapy and radiotherapy than leydig cells. Gonadal toxicity and compromise of reproductive functions will be more efficiently prevented and treated if addressed before treatment initiation. This review focuses on these issues in young cancer survivors of childbearing age, where methods of protecting or restoring endocrine function and fertility need to be considered

Have you read? Best of the Best: Basic Research

by Javier Angulo



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Female sexual dysfunction – Genital blood flow impairment by pelvic nerve injury
Pelvic nerve injury negatively impacts female genital blood flow and induces vaginal fibrosis – implications for human nerve-sparing radical hysterectomy. *Castiglione F, Bergamini A, Albersen M, Hannan JL, Bivalacqua TJ, Betiga A, Benigni F, Salonia A, Montorsi F, Hedlund P. BJOG 2015, 122: 1457-1465.*

As in men, injury of nerve structures supplying female genitalia may result in sexual dysfunction in women. This is not surprising since neurovascular control of genital structures orchestrates and integrates the sexual stimuli to yield a functional sexual response. In fact, in addition to bladder and anorectal functional derangements, radical hysterectomy is associated with sexual dysfunction in women. Despite the adoption of nerve-sparing radical hysterectomy surgical techniques, neurapraxia may damage autonomic nerves supplying the vaginal wall and clitoris. Castiglione and colleagues aimed to create a female animal model mimicking damage of pelvic nerves caused by nerve-sparing radical hysterectomy and to evaluate the impact of this damage on genital blood flow responses. They induced unilateral crush injury of only the pelvic nerve (PNC) or of the pelvic nerve, the hypogastric nerve and vesico-genital branches of the pelvic plexus (clock-nerve crush; CNC) and evaluated genital blood flow responses to pelvic nerve electrical stimulation at 3 and 10 days after PNC or CNC. Pelvic nerve injury resulted in impaired blood flow responses to electrical stimulation as shown by the **~50-60% reduction in blood flow increase in vaginal wall and clitoris** after stimulation of crushed

nerve when compared to preserved contralateral nerve. There were no significant differences between PNC and CNC, and between 3 and 10 days after injury. An additional experimental series consisted of an experimental group of female rats undergoing bilateral PNC and a control group of animals undergoing sham operation for evaluating expression profiles in vagina and clitoris 10 days after surgery. Histological and immunofluorescence assays revealed distal vaginal fibrosis with altered immunodetection of collagen I and III. Western blots confirmed significant increase in collagen I and III protein expression in vagina but this increase was not observed in clitoris. Epithelium, muscular and lamina propria layers as well as vasculature of distal vagina displayed substantial nNOS fluorescence that appeared lower in the distal vagina of injured rats. Reduced nNOS expression in both vagina and clitoris after PNC was confirmed by Western blot. In contrast, in the vagina, expression of eNOS was confined to the vascular structures and no alteration of its expression in vagina and clitoris after PNC was observed.

Castiglione and colleagues describe an animal model to evaluate female genital blood flow impairment resulting from injury of the pelvic nerve. They propose that **pelvic nerve injury causes a loss of nitrergic nerve fibers that results in a reduction of genital blood flow responses and vaginal fibrosis**. Like in the male setting, it is assumed that fibrosis results from the relatively hypoxic state derived from the loss of nitrergic regulation of blood supply caused by nerve injury. However, **in this case as well as in the male counterpart, the development of hypoxia after nerve injury requires further demonstration and it is still on debate**. In the same way, the impact of nerve injury on endothelium (a putative victim of hypoxia-induced changes) is controversial. This study, although lacking functional evaluation of the endothelium-mediated actions, points to no alteration of endothelial structures (eNOS expression) in coincidence with some studies

analyzing endothelial function of corpus cavernosum after cavernous nerve injury in rats and radical prostatectomy in humans.

It should be considered that **longer evolution periods need to be analyzed and that the evaluation of genital blood flow responses specifically gives information of female sexual arousal** without providing functional testing of other female sexual function components. However, it is undeniable that the animal model described in this article represents a key step, not only for **deciphering the pathophysiology of sexual dysfunction after nerve-sparing hysterectomy** but also to **raise and evaluate potential strategies aimed to minimize the sexual impact** of this sometimes unavoidable surgical procedure.

Aging-related ED – Impact on sirtuins and NO-pathway

MicroRNA-200a is up-regulated in aged rats with erectile dysfunction and could attenuate endothelial function via SIRT1 inhibition.

Pan F, Qiu XF, Yu W, Zhang QP, Chen Q, Zhang CY, Chen Y, Pan LJ, Zhang AX, Dai YT.

Asian J Androl 2015, doi: 10.41103/1008-682X.154991. [Epub ahead of print]

The increase in the number of aged people is an outstanding phenomenon of the last decades that will be aggravated in the next future. This represents a challenge for combating age-related chronic diseases. These age-related diseases include erectile dysfunction (ED) whose prevalence notably increases with age. Vascular (erectile?) aging does not merely result from the accumulation of age-related co-morbidities but also from specific process due to ageing. MicroRNAs (miRNAs) are a family of highly conserved, small (~21–23 nucleotides) noncoding RNAs that regulate gene expression at the post-transcriptional level. In general, miRNAs bind to complementary sites of target mRNAs leading to a negative regulation of transcript stability and translation. The ability of miRNA to

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regulate many targets at the same time makes them good candidates to control multifactorial physiological processes like aging. In this sense, growing evidence supports a crucial role of miRNAs as mediators of vascular aging both in animal models and in humans.

In a previous work, Pan and colleagues identified four up-regulated miRNAs in corpus cavernosum of aged rats that could be targeted to genes involved in endothelial NO/cGMP pathway. In the present study they analyze the possible involvement of one of these miRNA, miR-200a, on pathophysiology of aging-related ED in rats. By testing erections in response to apomorphine subcutaneous injection, they segregated aged rats (18 months old) into two groups: One displaying normal erectile responses and the other constituted by rats showing impaired erectile responses to apomorphine and then considered to have ED. Aged rats with ED had indeed reduced erectile responses to cavernous nerve stimulation and decreased content of endothelium and smooth muscle in cavernosal tissues when compared to either young or aged rats without ED. A near 3 fold up-regulation of miR-200a was detected in penile tissues of aged rats with ED that was accompanied by significant reductions in sirtuin-1 (SIRT1) protein expression as well as reductions in eNOS and cGMP content. Authors aimed to strength this associative relationship with confirmation of a causal impact driven by miR-200a on endothelial cells isolated from cavernosal tissue of aged rats without ED. Transfection of these cells with miR-200a resulted in down-regulation of SIRT1, eNOS and cGMP.

Pan and colleagues propose that **up-regulation of miR-200a in cavernosal tissue of aged rats leads to down-regulation of SIRT1 that results in defective eNOS/NO/cGMP pathway and impaired erectile function**. Aging has been related to **alterations in several critical cellular homeostatic and stress resistance pathways** that suppress oxidative stress and

inflammation. Sirtuins are NAD-dependent deacetylases involved in cellular response to stress. In fact, they have been shown to counterbalance NF- κ B inflammatory system. SIRT1 seems to be involved in orchestrating different stress response pathways and the decline in SIRT1 activity with aging is accompanied by increased inflammation and oxidative stress. The study by Pan and colleagues suggests that **modulation of miR-200a up-regulation and/or of SIRT1 down-regulation could be a therapeutic target for preserving erectile function in advanced age**. However, it opens novel interesting questions that are worth to be addressed before establishing this therapeutic target. For instance, since pharmacological activation of SIRT1 is possible, this approach should be tested in the relief of ED in aged animals. This combined with functional evaluation of endothelial responses would help to confirm the endothelial function as the process regulated by miR-200a/SIRT1 axis. Finally, it would be key to know why some aged rats are resistant and others prone to the miR-200a up-regulation and subsequent cavernosal alterations and ED for proposing therapeutic interventions.

Effect of DDAH/ADMA/NOS regulation pathway on cavernae corporum cavernosorum rat penis of different ages. Wang JH, Chen D, Zhang KQ, Zhang H, Fu Q. *Andrologia* 2015, doi: 10.1111/and.12441

As mentioned for the above commented article, preservation of NO/cGMP pathway would be key to maintain adequate erectile function in advanced age. Asymmetric dimethylarginine (ADMA) is an endogenous inhibitor of NO synthases (NOS) whose levels modulate the NO/cGMP pathway. In fact, increased circulating ADMA levels have been associated with the presence of ED in patients. ADMA is removed by enzymatic degradation by dimethylarginine-dimethylaminohydrolase (DDAH). Two DDAH isoforms exist, DDAH1 and DDAH2, while heterozygous deletion studies suggest that DDAH1

is the primary isoform responsible for ADMA degradation in vascular endothelium and seems to play a role in endothelial function in vivo.

Wang and co-workers analyze the possible involvement of DDAH/ADMA/NOS pathway in ED associated with advanced age in rats. Aged rats (18 months old) showed reduced erectile responses to intracavernosal injection of papaverine. This functional deficiency was associated with structural alterations consisting of diffuse fibrosis and damaged endothelium. Increased levels of ADMA were detected in the penises of aged rats while the cGMP content was diminished. Expressions of penile DDAH1 and DDAH2 were reduced as they were those of eNOS and nNOS.

The authors propose that alterations of DDAH/ADMA/NOS pathway associated with aging could be responsible for the impairment of erectile responses in aged rats. The results points to an involvement of DDAH/ADMA in pathophysiology of ageing-related ED but it should be consider that the evidence provided by Wang and colleagues is just **associative and not causal**. It is reasonable to think that **down-regulation of the main enzyme responsible for ADMA degradation in aged penis would lead to increased levels of this NOS inhibitor in penile tissue and would subsequently result in reduced production of NO by eNOS and/or nNOS. NO production would be further limited by the diminished expression of eNOS and nNOS, likely compromising erectile function**. However, this plausible chain of events should be confirmed, for instance, by interventions aimed to reverse this pathogenic mechanism in aged rats. Moreover, the endogenous production of ADMA has been proposed as an explanation for the "**L-arginine paradox**": The observation that exogenous L-arginine in vivo or in vitro increases NO production, despite its baseline concentrations that should saturate NOS. This might be consistent with the presence of an endogenous competitive antagonist, such as ADMA, at the

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active site of NOS that would be displaced by high concentrations of the substrate, L-arginine. In this sense, increased penile levels of ADMA would explain the positive effect attained by administering large doses of L-arginine to ED patients described by Zorogniotti & Lizza more than two decades ago.

Cavernous nerve injury-induced ED – Prolonging the staying of stem cells in corpus cavernosum

Nanoparticle improved stem cell therapy for erectile dysfunction in a rat model of cavernous nerve injury. Lin H, Dhanani N, Tseng H, Souza GR, Wang G, Cao Y, Ko TC, Jiang H, Wang R. *J Urol* 2015, doi: 10.1016/j.juro.2015.10.129 [Epub ahead of print].

Evaluation of cell therapy strategies to prevent or reverse ED in animal models, and more specifically ED secondary to nerve injury, is one of the most recurrent research topics in the journals covering Sexual Medicine field. As majority of evidences have previously shown

beneficial effects of cell therapy in alleviating ED in animal models of cavernous nerve injury, actual research efforts are focused in improving efficacy by modulating functional potential of stem cells or proposing more effective and/or convenient modalities of cell therapy. The here selected article is one example.

Lin and his collaborators show a novel approach to increase the time that intracavernosally injected stem cells remain in corpus cavernosum in rats undergoing bilateral cavernous nerve crush. The procedure consisted of magnetizing adipose-derived stem cells (ADSCs) by including magnetic nanoparticles (NanoShuttle). Application of a magnet to the penis allowed for retaining ADSCs in the corpus cavernosum for up to 3 days after injection while in the absence of nanoparticles or the magnet the ADSCs were washed out from corpus cavernosum after 1 day. Functional assays performed 4 weeks after nerve injury and concomitant ADSCs injection showed that magnetized Nano-ADSCs were more effective in preventing ED and in increas-

ing smooth muscle and endothelium markers in cavernosal tissue of the rats.

Thus, it is proposed **that increasing the time the stem cells are remaining in the corpus cavernosum will result in larger beneficial effects on cavernosal tissue that will preserve erectile responses after cavernous nerve injury.** However, it would have been interesting to analyze the impact of retaining magnetized stem cells on **nNOS content**, since loss of nitrergic innervation in cavernosal tissue is a hallmark of cavernous nerve injury-induced ED. On the other hand, it should be noted that **prolonging the exposure of corpus cavernosum to ADSCs does not necessarily means that the functional improvement obtained is related to enhanced incorporation of these cells to cavernosal structures.** In fact, although this is a controversial issue, substantial evidences point to the incorporation of stem cells to host tissue as not very relevant to functional improvements.

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Keys from Kols: Long-term results after partial plaque excision and grafting with collagen fleece in Peyronie's disease

by Georgios Hatzichristodoulou



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Introduction

Peyronie's disease (PD) is an acquired benign disease of the penile tunica albuginea leading to fibrous plaques. Approximately 3–9% of males between 40 and 70 years are affected. However, PD also occurs in the younger patient population. The fibrous plaques can cause penile deviation, penile shortening, painful erections and erectile dysfunction (ED) in up to 58% of patients [1–5]. Main symptoms of the acute disease phase are increasing plaques and deviation, in combination with pain. In the stable phase, which usually begins 12 months from onset, deviation and plaques remain stable while deviation is the main and predominant symptom [6]. When penile deviation leads to inability for sexual intercourse surgical therapy is indicated, which remains the gold standard for treatment of stable penile deviation in PD [5].

Indications for surgical therapy

Indications for surgical therapy of PD include disease duration of at least 12 months, stable disease of minimum 6 months, stable penile deviation, no penile pain, unsuccessful conservative treatment, and most important the inability to perform sexual intercourse. Surgical therapy is subdivided in three main procedures:

1. plication techniques
2. grafting techniques with partial plaque excision or incision followed by defect closure with various grafts
3. correction of deviation with simultaneous penile prosthesis implantation in patients with ED not responding to medical therapy [3, 5].

When deviation is $>60^\circ$ a grafting technique is preferred to avoid penile shortening. Grafting techniques lead to lengthening of the concave side of deviation, thus resulting in penile straightening. All grafts, which are used to cover the defect of the tunica albuginea, autologous or non-autologous, however, have to be exactly adjusted and sutured into the defect. This leads to increased operative time and may also lead to defects on the donor site when autologous material is removed [5, 7, 8]. Grafting techniques are indicated when penile deviation measures $>60^\circ$, when the penis is short, and when there is an hourglass deformity. However, patients are required to have good preoperative erectile function because in comparison to plication techniques there is an increased risk of postoperative ED.

Surgical technique using a self-adhesive collagen fleece for grafting following partial plaque excision

After lateral dissection and mobilization of the neurovascular bundle, an artificial erection is performed to assess the degree of deformity and the point of maximum curvature. Partial plaque excision is performed at the concave side of deviation at the point of maximum curvature by excision of an ellipsoid part of the tunica albuginea. The tunical defect is then extended laterally in the transverse direction up to half of the circumference on both sides of the penile shaft, leaving at least 1 cm space to the urethra. Grafting of the tunical defect is then performed using a ready-to-use, self-adhesive collagen fleece coated with tissue sealant (TachoSil®, Takeda, Berlin, Germany). This provides a watertight closure of the tunical defect. Additional fixation by sutures is not necessary (figures 1–4) [9]. Results of correction are documented intraoperatively by repeatedly artificial erection using physiological saline.

Results of partial plaque excision and grafting with collagen fleece

During a 9-year period (2004–2013) a partial plaque excision and grafting with the collagen fleece was performed in $n=244$ patients with dorsal penile deviation. Mean patient age was 57.0 years (range: 33–73 yrs). Mean operative time was 80.8 minutes (range: 60–165 min). A totally penile straightening was achieved in 238/244 patients (97.5%). Mean long-term follow-up was 36.8 months (range: 3–100 mon). Erectile function improved in 23.3% of patients, remained stable in 66% of patients, and worsened in 10.7% of patients. Mean penile length before and after surgery was 14.3 cm (range: 6–21 cm) and 15.0 cm (range: 8–22 cm), respectively. 230/244 patients (94.3%) had normal glans sensibility in the long-term.

Summary and conclusions

Grafting of the tunical defect by the self-adhesive collagen fleece following partial plaque excision in the surgical management of PD is safe and successful. Long-term results in regard to penile straightening, erectile function, and the sensibility at the glans are encouraging. The most important advantages of the collagen fleece for grafting of the tunical defect following partial plaque excision are: Easy application, no need for exact adjustment of the graft to the tunical defect, and no need for suturing the graft into the tunical defect. Therefore this technique is less time-consuming comparing to other grafting techniques. Moreover, the costs of the collagen fleece are about 190 EUR and thus more cost-effective comparing to other grafts for PD surgery (e.g. 4-layer SIS approx. 390 EUR). Additionally, an haemostatic effect is provided by the collagen fleece. Thus, the collagen fleece represents a feasible and safe alternative to other grafts for PD reconstructive surgery.

Keys from Kols: Long-term results after partial plaque excision and grafting with collagen fleece in Peyronie's disease

Figure 1

Penile deviation (80° dorsal) after mobilization of neurovascular bundle (in artificial erection).

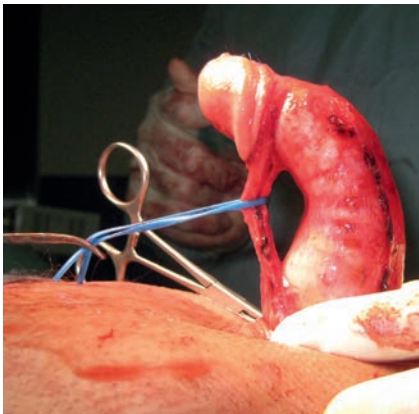


Figure 2

Defect of tunica albuginea after partial plaque excision.



Figure 3

Grafting of the tunical defect with collagen fleece.



Figure 4

Straight penis after reapproximation of neurovascular bundle and closure of Buck's fascia at end of operation (in artificial erection).



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Keys from Kols: The treatment for the hypogonadal male: Replacement or restoration? The argument for the use of SERMS

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The only FDA treatment for the hypogonadal man, barring pituitary/hypothalamic dysfunction, is testosterone (T) replacement with short or long lasting injections, topical gels, buccal lozenges, intranasal T or T pellets. Hypogonadism is an endocrine disorder that can have profound, yet not life threatening, effects on the male. The treatment of endocrine disorders, by and large, is primarily replacement therapy. Adrenal insufficiency and thyroid deficiency are good examples. Yet treatment of the most common endocrinopathy, diabetes type 2 (DT2), is not replacement. After an attempt of life style modification most DT2 patients are started first on sulfonylureas, and metformin.¹ Life style modification has been shown to positively influence glycemic control but in 10 year study compliance after 6 months was less than 20%.² Whereas sulfonylureas increase the pancreatic insulin production, metformin decreases hyperglycemia primarily by suppressing hepatic glucogenesis.³ Replacement therapy with insulin is recommended after life style modifications, metformins and sulfonylureas have failed to achieve glycemic control.

Can we model treatment of the hypogonadal male after the treatment of type 2 diabetes? Is there any evidence that we can restore T without replacement and if so, how? The etiology of late onset hypogonadism (LOH) has been attributed to a decrease in the secretion of hypothalamic and pituitary gonadotropins and a decrease in Leydig cell numbers and responsiveness in the aging male.⁴ Yet, the European Male Aging Study (EMAS) has characterized 85% of hypogonadal men as secondary that is, the testes are being insufficiently stimulated by the hypothalamic-pituitary axis.⁵ Theoretically with appropriate stimulation from the pituitary, the aging testis should be able

to produce eugonadal levels of T. Every urologist who treats male infertility understands the detrimental impact of exogenous T on fertility. Clomiphene citrate, a selective estrogen receptor antagonist (SERM), has been used off FDA label to treat the hypogonadal infertile man since 1964.⁶ A recent meta-analysis confirmed the positive effect of SERMS on sperm concentration and percent motility in infertile men.⁷

Can SERMS then be used to treat LOH? The ability of SERMS to increase LH in men was recognized as early at 1968.⁸ Paulsen demonstrated significant increases in LH, FSH and T in normal older men taking 50 mgs of CC twice a day.⁹ Tenover and Bremner looked at an 8 weeks trial of CC (50 mg BID) in 5 healthy older and 5 young eugonadal men (mean age 73 vs 29 years; mean baseline T 518 vs 498) and demonstrated that older men both increased LH and FSH and T and E-2. Though levels of T were significantly lower in the older group, the levels achieved in both groups were at least comparable to those achieved with many current day exogenous treatments.¹⁰ Lim observed normalization of T levels in 5 hypogonadal uremic men with uniform increase in libido, sexual potency, and a general sense of well-being using 100 mgs of CC daily for as long as 12 months. The normalization of T continued for 4–5 months after discontinuation of therapy Plasma estradiol levels were elevated at baseline and did not change significantly from baseline.¹¹

One of the champions for the use of SERMS for the treatment of LOH was the late Andre Guay.¹² Guay et al. challenged 21 older men with erectile dysfunction (ED) and secondary hypogonadism with 50 mg CC bid for 7 days and normalized their T, demonstrating that at that at least in the short term, the restoration of normal T levels was possible in older hypogonadal men. He then expanded the concept with an 8 week double blind placebo controlled crossover study in older men (mean age 62) with secondary hypogonadism and ED (documented with nocturnal penile tumescence scan (NPT). Again, normalization of serum T was seen but, disappointingly, no improvement was seen in

NPT or sexual function questionnaires in the group as a whole. When the study population was split between younger and older groups (mean age 53 and 66 respectively) in a secondary analysis, not surprisingly, the differences between the treatment groups with the sexual function questionnaires and NPT testing achieved statistical significance. This was the first demonstration that a SERM could not only normalize T levels in SHGD but result in symptomatic improvement.¹³ Guay et al. then began treating men in his practice with SHGD with CC (50 mg) 3 times a week. He reported an observational series of 173 men with ED and SHGD treated for 4 months. The diagnosis of ED was based on self-report and not a validated questionnaire, and a placebo arm was lacking. The outcome was measured as “responder” to treatment (successful intercourse > 75% of the time), partial responder (successful intercourse 50%–75% of the time) and nonresponder. As in his previous studies, LH, FSH and free T levels increased. Sexual function improved in 75% and did not change in 25%. Age and vascular co-morbidities negatively affected the response rates.¹⁴

Taylor and Levine in an observational study compared the biochemical efficacy of CC to exogenous gel treatment (T replacement therapy (TRT)) in 104 men (65 CC vs 39 on TRT). The groups were not strictly identical but demonstrated comparable increases in T. Prostate-specific antigen (PSA) levels and hematocrit (HCT) did not significantly change in follow-up (23 months) 37 Moskovic et al. demonstrated an excellent chemical response in a younger cohort of 29 men (mean age 44) followed for 3 years on CC 25 mgs every other day. 75% of men had altered bone mineral density (BMD) at baseline (75%) which normalized at 1 year in 25%. No improvement in BMD was observed after the first year. Though estradiol increased, significantly no gynecomastia or breast tenderness occurred. No side-effects were reported.¹⁵

The efficacy of CC in relieving the symptoms of hypogonadism is often anecdotally reported as being inferior to exogenous therapy without the support of randomized double-blind studies. Katz

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et al. retrospectively looked at symptom relief with CC (25 mg every other day) in 86 young (mean age 29) hypogonadal men, most of whom were presenting for infertility (57%) over a 4 years period at a Sloan Kettering andrology practice. The men were followed for a mean of 19 months. Surprisingly, the median number of positive baseline responses on the androgen deficiency in aging males (ADAM) questionnaire was 5 that dropped to 2. These "generally very healthy" young men started at a mean T level of 192 ng/dl and increased their T to 485 (despite a target treatment level of 550 ng/dl). The symptoms that showed significant increases included "decreased libido, lack of energy, decreased life enjoyment, sad/grumpy, decreased sports performance."¹⁶ The lack of a placebo arm weakens the strength of the study. Further support of the efficacy of CC in relieving hypogonadal symptoms comes from a retrospectively gathered observational comparative study from Baylor by Ramasamy et al. In examining the effect of CC versus replacement therapy on hypogonadal symptoms, no significant differences were seen in between T injections, T gels or CC. T levels were highest with injections (1104 ng /dl) versus CC (504 ng/ dl) or the gels (412 ng /dl).¹⁶ The lack of a difference in symptom relief supports the concept that symptom relief may be tied to a threshold level that is achieved with T restoration with SERMS.

Clomiphene citrate is a 60/40 mixture of two stereoisomers, enclomiphene and zuclomiphene. Recently, there has been interest in the trans isomer of CC (EC). Distinct differential pharmacokinetics of the two isomers have been demonstrated.¹⁷ Though the Cmax and Tmax were comparable, the area under the curve for the isomers is dramatically different, after a single dose administration of 50 mgs of CC in women with polycystic ovaries. At 456 h, ZC was detected in 9/9 patients versus 1/9 for EC. The half-life of EC is 7–8 hr.¹⁸ EC was evaluated in a randomized, open label, fixed dose, active control (7 EC and 5 exogenous gel), two center phase IIB study in 12 men with secondary hypogonadism treated previously with topical T. After T discontinuation of exogenous T, T levels in both groups averaged 165 ng /dl. After treat-

ment T levels increased in both groups to over 540 ng/dl but decreased to baseline after cessation of treatment suggesting that the hypothalamic testicular axis reverts to its pretreatment state and continued therapy is necessary. Baseline sperm counts were severely depressed at baseline. With treatment sperm counts increased in all men on EC at 6 months only 2 of 5 of gel patients increased their sperm concentrations to over 20 million/ml. Gonadotropins increased only in the EC arm.¹⁹ In follow-up clinical trials, safety and clinical efficacy were comparable to a gel preparation while preserving sperm counts. Sperm counts were decreased in the men treated with gels. Side effects were comparable to CC. The most significant adverse events were hot flushes (10%), visual disturbances headaches, nausea and vomiting. Aside from the hot flushes, all events occurred in < 5% of the study population.²⁰

The reader should be aware that SERMS are not FDA approved for the treatment of hypogonadism and are "off label" use. So how do I treat hypogonadal men? Clearly the hypogonadal infertile male should not be treated with exogenous T. Peer reviewed data support the use of SERMS in these men. How do we treat these men after the successful pregnancy? Should they be converted to exogenous therapy or continued on SERMS? There is no reason to believe that their T is going to magically return to normal. They will most likely require lifelong treatment, just as the hypothyroid or DT2 patient. What are the dangers of long term clomid therapy?

The safety of long term SERM use has been evaluated in the breast cancer trials and is nicely summarized by Goldstein et al. The most common side effect are menopausal symptoms unique to women (hot flushes and atrophic vaginitis) SERMS appear to be protective of bone mineral density and some studies have shown an increase in BMD while on therapy. There appears to be no increased risk of cardiovascular events but a mild increase in venous thromboembolism and pulmonary embolism, with a relative risk of 1.6 and 3.01, respectively. In the Stockholm Breast Cancer Study, there was no increased rate of

hospitalization for thromboembolic events. An increase in the risk of cataracts (RR 1.14) was also described.²¹ In a 3 month randomized prospective, placebo controlled, comparator trial of EC and Androgel 1.62%, 21 % of the men described adverse events, though there was no difference between the treatment groups. There were no ophthalmologic changes and no significant one death from an ischemic stroke was reported in the EC group in a patient at high risk for embolic disease (unmedicated atrial fibrillation, obesity, DT2). It was felt that the patient's underlying disease was more likely the cause of the event vs the medication. As with T replacement, caution should be advised in treatment men at high risk for thromboembolic events.²⁰ Long term prospective safety studies are lacking in men, particularly with respect to prostate health. To date none of the studies suggest and increase in PSA over what would be expected for T replacement.

With proven biochemical and therapeutic efficacy and tolerability, should symptomatic men with secondary hypogonadism (<LH< 9.4 and T< 300) be treated primarily with SERMS, reserving replacement for men who do not respond? Why not? In my practice, I obtain two morning total free and total T and E-2 levels, LH, FSH, prolactin, SHBG, CBC and PSA. After a complete history, physical and a thorough informed consent discussion men are started on generic clomiphene citrate 25 mgs or tamoxifen 10 mgs daily. The choice of medication is based on insurance reimbursement. Repeat labs are performed in 4 weeks. Responders should have a significant increase in their T with symptomatic improvement. Unless the etiology of the HGD is clearly pituitary insufficiency or in cases of combined primary and secondary hypogonadism. Compliance and efficacy of medication is easily monitored by examining LH,FSH and estradiol levels. A lack of T normalization without increase in gonadotropins and estradiol are consistent with noncompliance whereas an increase in LH, FSH and estradiol without a concomitant increase in T is indicative of primary testicular failure. In the marginally responsive man, sometimes doubling the dose will provide the desired result. In a retrospective

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analysis of 76 men on CC, 62% of men (average 46yrs, baseline T of 179ng/dl) had an increase of ≥ 200 ng/dL in total T.²² A 63% normalization of T (>300 ng/dl) was seen in the pooled data from the enclomiphene registry trial.²⁰ Though arguably a lower response than exogenous treatment the populations treated were very different. In the randomized placebo controlled EC trial men were obese, primary hypogonadism was excluded and the T normalization rates were inferior to EC. Long term adherence rates for exogenous treatment are low. At one year less than 15% of men continue exogenous gel therapy. The ability to normalize T with an oral formulation presents a major benefit to SERMs. What man would want to produce his own T instead of having to buy it? Long term follow up is every 6 months and the labs assessed are exactly those recommended for replacement therapy. In men who fail the SERMS, I then move on to exogenous treatment. An additional benefit to SERM therapy is the lack of testicular atrophy uniformly seen with exogenous therapy.²⁰

In summary, it is possible for us to model therapy after the treatment of DT2 treatment, stimulate endogenous production (in men who still have testicular reserve, 85% of men) and reserve exogenous replacement for those who do not respond.

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MEETINGS AND EVENTS CALENDAR 2016



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FEBRUARY

18th Congress of the European Society for Sexual Medicine

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XIX Reunión Nacional del Grupo de Andrología

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Location: Madrid, Spain
Website: www.aeu.es/eventosgrupos.aspx

MARCH

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March 9–3, 2016
Location: Rancho Las Palmas Dr, Rancho Mirage, California, USA
Website: www.pcrsonline.org

2nd International Workshop on Klinefelter Syndrome

March 10–13, 2016
Location: Münster, Germany
Website: www.klinefelter2016.de

31st Annual EAU Congress

March 11–15, 2016
Location: Munich, Germany
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APRIL

ENDO 2016 – 98th Annual Meeting and Expo of the Endocrine Society

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Location: Boston, Massachusetts, USA
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ASA 41st Annual Conference

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XIII Congreso Sociedad Española de Contracepción

April 6–8, 2016
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Website: <http://sec2016.sec.es>

MAY

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May 6–10, 2016
Location: San Diego, CA, USA
Website: www.aua2016.org

13th Congress of the European Federation of Sexology

May 25–28, 2016
Location: Dubrovnik, Croatia
Website: <http://web.aimgroupinternational.com/2016/efs>

XXXII Congresso Nazionale SIA - 2016

May 28–31, 2016
Location: Stresa, Italy
Website: www.andrologiaitaliana.it

JUNE

XV Congresso Nacional de Andrologia. Sociedade Portuguesa de Andrologia, Medicina Sexual e Reprodução – SPA

June 3–5, 2016
Location: Carvoeiro – Algarve, Portugal
Website: www.spandrologia.pt/?news=117

The 9th INYRMF Meeting

(Adjacent to the European Testis Workshop)
June 9–11, 2016
Location: Rennes, Brittany, France
Website: [http://andrologysociety.org/getattachment\(...\)](http://andrologysociety.org/getattachment(...))

19th European Testis Workshop

June 11–15, 2016
Location: Palais du Grand Large, Saint-Malo, France
Website: <http://www.etw2016.org>



Program Schedule I Thursday, 4 February 2016

Room Time	Auditorium A	Room Madrid	Room Paris	Room Berlin	Foyers
08:00					Registration Counter 07:00–18:00
09:00	RT-01 How to take the pain out of the sex?	PS-01 Male sexual dysfunction – medical	WS-01 Penile cancer: contemporary management and sexual consequences	NA-01/Part 1 ASESA/SPA <i>Spanish, Portuguese language</i>	Exhibition 10:00–20:00
10:00	ML-01 Advocating sexual health - ...		WS-02 Sex in the disabled		Highlighted Posters 10:00–10:30 in the Poster Area
11:00	RT-02 Industry sponsored Round Table	RT-03 Sex and conception after gynecological malignancy	ESSM-01 New opportunities for research funding from ESSM & interim...		HP-01 Prostate cancer treatment and Peyronie's
12:00					
	SA-01 Industry sponsored Satellite Symposium	Break			
13:00	ML-02 The “Absent-Penis”...			NA-01/Part 2 ASESA/SPA	
14:00					
15:00	RT-04 Sex steroids: the fuel or the catalysator of sexual function?	LV-01 Industry sponsored Live Surgery Broadcasted from <i>Puerta de Hierro Hospital in Madrid</i>	ESSM-02 ESSM resident's corner and presentations of case studies	PS-02 Psychological research	
16:00	ML-03 ISSM lecture				Break / HP-02
	RT-05 Endometriosis and its sexual consequences		RT-SMSNA Management of the fibrotic penis		HP-02 Female sexual dysfunction
17:00		ML-04 Erotic art at the Prado			
18:00	SA-02 Industry sponsored Satellite Symposium				
	Opening Ceremony				
19:00	19:00 – 20:00 Networking Reception in the exhibition area				

ABBREVIATIONS

RT	– Round Table
ML	– Master Lecture
WS	– Workshop
VS	– Video Surgery Course
SA	– Industry sponsored Satellite Symposium

PS	– Podium Session
ESSM	– ESSM Session
LV	– Live Surgery Session
NA	– National Session Symposia

Friday, 5 February 2016 | Program Schedule

Room Time	Auditorium A	Room Madrid	Room Paris	Room Berlin	Foyers
08:00					Registration Counter 07:30–18:00
09:00	RT-06 Is sex dying with age?	LV-02 Industry sponsored Live Surgery Broadcasted from <i>La Zarzuela Hospital in Madrid</i>	WS-03 Hyperprolactinemia		Exhibition 08:00–17:00
10:00	RT-07 Mysteries of the female orgasm		WS-04 Intersex challenges – caring for families and individuals with dsd	NA-02 Eurasian Andrology Summit TAD/SIA <i>English language</i>	Poster Exhibition 08:00–17:00
11:00	ESSM-03 WAS Session		Break/HP-03		Highlighted Posters 10:00–10:30 in the Poster Area
12:00		RT-08 Sextytocin	WS-05 How to deal with sexual consequences of menopause?	NA-02 TAD/SIA	HP-03 Body and mind, gender and sexual orientation
13:00	SA-03 Industry sponsored Satellite Symposium	Break			
14:00	ML-05 Flibanserin for HSDD in women...				
15:00	RT-09 T use and abuse focus on body composition and metabolic profile	VS-01 Industry sponsored Video Surgery Course	PS-05 Female sexual function & dysfunction	PS-04 Basic and translational research	
16:00	ML-06 Do we smell sexy?...	Break/HP-04, HP-05, HP-06			Highlighted Posters 15:30–16:00 in the Poster Area
17:00	RT-10 Sexual health is cardiovascular health? A 2016 update	RT-11 Joint session with EPATH	PS-06 MSD surgical/Peyro- nie/penile disorders	NA-03 AIUS – Association Interdisciplinaire post Universitaire de Sexologie <i>English language</i>	HP-04 Congenital and rare penile disorders
18:00	ML-07 Mood, and its role...				HP-05 ED surgical treatment
19:00		ESSM Annual Business Meeting – members only –			HP-06 Male sexual dysfunction – mixed

Program Schedule I Saturday, 6 February 2016

Room Time	Auditorium A	Room Madrid	Room Paris	Room Berlin	Foyers
08:00	RT-12 Dermatological changes in the vulvovaginal area...	RT-13 Men's health checklist: male health status and sexuality throughout the lifespan	WS-06 Difficult cases in psychogenic ED: from diagnosis to treatment		Registration Counter 07:30–17:00
09:00			WS-07 Sexual consequences of sexual transmitted infections (STI)		Exhibition 08:00–17:00
10:00	RT-14 Where does normal stop and perverse start?	RT-15 Complex cases and complication management in penile disorders	Break / HP-07, HP-08, HP-09		Poster Exhibition 08:00–17:00
11:00	ML-08 State of the art in male contraception		WS-08 Difficult cases of ejaculatory disorders: practical tips		Highlighted Posters 10:00–10:30 in the Poster Area
12:00	RT-16 Shocking penile therapies: ESWT from bench to bedside	RT-17 Penile controversies: the foreskin	WS-09 Infertility and sexuality: why and how to pay attention		HP-07 Basic Science
13:00	SA-04 Industry sponsored Session: cases that matter	Break			HP-08 ED and prostate
14:00	ML-09 Award of Excellence				HP-09 Hormones
15:00	RT-19 Industry sponsored Round Table	RT-18 The health benefits of sexual expression	PS-07 Male sexual dysfunction – submitted surgery videos		
16:00	RT-20 Urethral surgery and its effects on sex life	RT-21 Impact of metabolic and eating disorders on sexual function in men and women	PS-08 Male sexual dysfunction – epidemiology, medical management and conservative treatments		
17:00		Closing Ceremony			

PAYMENT OF THE ESSM MEMBERSHIP FEE 2016

To be sent back to:

ESSM secretariat
Via Ripamonti 129 – 20141 Milano, Italy
www.essm.org

Phone: +39 02 – 56601 625
Fax: +39 02 – 70048 577
email: admin@essm.org

Membership goes from January to December

☐ New Member

☐ Member since: _____

Title: _____		
Name: _____	Surname: _____	
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Institution: _____		
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First Specialty: _____	Second Specialty: _____	

Membership category

- ☐ Full Member
☐ Associate Member

Membership type

- ☐ Simple ESSM EUR 50,00
☐ Combined ESSM + ISSM EUR 160,00

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1. _____
2. _____

Scientific work (two most important – peer reviewed – publications) – for new members only

1. _____
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- ☐ Herewith confirms the payment of EUR 50,00 for the **ESSM membership** cost for the year 2016 by:
☐ Herewith confirms the payment of EUR 25,00 for the **ESSM membership FOR RESIDENTS IN TRAINING*** cost for the year 2016
☐ Herewith confirms the payment of EUR 160,00 for the **ESSM and ISSM membership** cost for the year 2016

* A letter of the Chairman of the Department is necessary

☐ Bank transfer to AIM Congress srl

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AIM Congress Srl – AIM Group – Via Ripamonti 129, 20141 Milano – C.a. Ms.Daniela Pajola
For your consent on data processing and communication as described in the above report:

Date _____ Signature _____

For more information please visit www.essm.org



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Announcement for the next Congress

18th Congress of the European Society for Sexual Medicine

4 – 6 February 2016 | Madrid, Spain



www.essm-congress.org