

mone and glucagons), reduced the glycosylation of hemoglobin, reduced the formation of ROS. This may, together with the improvement of tissue oxygenations, improve the endothelial function, nitric oxide production, endothelium dependent vasodilatations and erectile function. [18,19] It is necessary to perform further study to investigate the improvement of endothelial function after the treatment as cause for the restoration.

doi:10.1016/j.jomh.2010.09.121

ISMH World Congress 2010 Abstract 121

ISN'T IT TIME TO ABANDON PROSTATE SPECIFIC ANTIGEN (PSA) FOR PROSTATE CANCER SCREENING?

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Background: For over ten years, many experts have questioned the sensitivity and specificity of the PSA blood test as a screening tool, as well as its ethical application in men's health. Recently, Ablin, the PSA discoverer, referred to PSA as "a profit-driven public health disaster." Indeed PSA has been implicated as the cause of over-diagnosis and overtreatment of prostate cancer, which is harmful to men. Our analysis corroborates other recent studies, which demonstrate poor PSA performance as a screening test. We conducted a retrospective chart review of men who underwent transrectal prostate biopsy from 1990 to 2006. PSA levels were described with medians and compared with the Wilcoxon test. Linear regression models were used to study the relationships between regressors and responses. Logistic regression was used when the response was dichotomous. In all the models the PSA level was transformed to logarithms due to its extreme variance in value. Interactions with time were investigated in all instances. All the analyses were done using JMP 8.0 We reported primary analyses recently in Cancer, but in the interim, the American Urological Association recommended the screening of ALL men with PSA beginning at age 40!

Results: We analyzed 5,570 cases from 4,659 white men and 911 black men. Over time, greater numbers of men had been undergoing prostate biopsy for lower PSA levels, and the association between PSA and cancer was no longer significant, with areas under the ROC curve close to 0.5, consistent with a coin toss.

Additional analysis also showed that PSA performance does not improve in younger ages. Using logistic regression, effects of PSA and age were significant, but only because of large size of our cohort. The ROC curve has area of 0.61, likewise suggesting a lack of predictive value. Even among the youngest men in our cohort the area under the ROC curve were .58 in men <45, .72 in men 46-50 and .64 for men 51-55.

Conclusions: At this large tertiary care and community medical center, PSA has performed hardly better than a coin toss in predicting prostate biopsy results, regardless of patient age. The controversy surrounding the management of low grade prostate cancers, further magnifies the need for both scientific and ethical scrutiny of PSA and the courage to abandon it as a screening test.

doi:10.1016/j.jomh.2010.09.122

ISMH World Congress 2010 Abstract 122

SPECIALIZED PHYSIOTHERAPY FOR SEXUAL DISCOMFORT AND DYSORGASMIA ASSOCIATED WITH UROLOGICAL CHRONIC PELVIC PAIN SYNDROME (UCPPS)

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Background: Pain associated with sexual activity and/or ejaculation is commonly associated with the diagnosis of chronic prostatitis/chronic pelvic pain syndrome, currently known as UCPPS. These symptoms have been associated with greater negative impact on quality of life among men with UCPPS (and their partners). Too often, this condition has been considered an infection, leading to widespread overuse of antibiotics. In our experience, most of these men have pelvic floor dysfunction with myofascial

trigger points, many of which are amenable to specialized pelvic physical therapy (PT). Physiotherapy has been shown to be an effective treatment for pain in men with UCPPS as well as associated voiding symptoms and sexual dysfunction. We reviewed the cases of 36 consecutive patients, who received PT for UCPPS during the past 10 months.

Results: The mean age of our patients was 39 years (21-57), who had been experiencing symptoms for mean 22.4 months (2- 72+). Of the 36 patients, 25 (75%) experienced genital or pelvic pain associated with intercourse, 8 of these men experienced ejaculatory pain or dysorgasmia as well. Treatments included manual trigger point release, soft tissue mobilization and prescribed self care regimens for the patient to perform daily, at home. Patients have attended a mean 4.9 visits (1-19), indicating very good patient compliance. Among the men with sexual pain, improvement or resolution has occurred already in 10/25, regardless of duration of symptoms or number of visits to PT. However, men with an exercise regimen at the time of diagnosis were more likely to improve more quickly than men who were sedentary. Three patients have had no improvement, 5/25 have not followed up after initial visit(s) because of insurance, distance from home or noncompliance. Other patients continue the PT regimen and will be reassessed as our observations are ongoing.

Conclusions: Pain associated with sexual activity is a common component of UCPPS, which greatly impacts quality of life for these men. Specialized physiotherapy of the pelvic floor along with prescribed self-care regimens can greatly reduce these symptoms as well as other symptoms of UCPPS. This treatment is safe, effective and empowering to the patient. Indirect benefits might also include the initiation of lifelong self-care habits promoting exercise and stress management.

doi:10.1016/j.jomh.2010.09.123

ISMH World Congress 2010 Abstract 123

THE EFFECTS OF DUTASTERIDE, TAMULOSIN, AND THE COMBINATION ON STORAGE AND VOIDING SYMPTOMS IN MEN WITH MODERATE-TO-SEVERE BPH: 4-YEAR RESULTS FROM THE COMBAT STUDY

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Background: 4-year data from CombAT (n=4844) showed that dutasteride plus tamsulosin was associated with a significantly lower incidence of acute urinary retention or BPH-related surgery compared with tamsulosin, and significantly reduced the risk of BPH clinical progression compared with either monotherapy. We conducted a *post hoc* analysis of 4-year data from CombAT to assess the impact of combination and monotherapies on storage and voiding symptoms.

Methods: Mean change from baseline IPSS storage and voiding subscores was summarised by treatment group at each post-baseline assessment using the last observation carried forward approach. Storage subscores were calculated from IPSS questions 2, 4 and 7; voiding subscores from questions 1, 3, 5 and 6.

Results: Mean baseline IPSS storage subscore was 7.3 in the combination group, 7.2 in the dutasteride group and 7.2 in the tamsulosin group; mean baseline IPSS voiding subscore was 9.3 in the combination group, 9.2 in the dutasteride group and 9.2 in the tamsulosin group. At month 48, mean improvement in storage subscore was significantly ($p < 0.001$) greater in the combination group (-2.3) than in the dutasteride (-1.9) and tamsulosin (-1.4) groups. The improvement in storage subscore with combination therapy was significantly superior ($p < 0.001$) to that with dutasteride and tamsulosin from month 3 and month 12, respectively. Also at month 48, mean improvement in voiding subscore was significantly ($p < 0.001$) greater in the combination group (-4.0) than in the dutasteride (-3.5) and tamsulosin (-2.4) groups. The improvement in voiding subscore with combination therapy was significantly superior to that with dutasteride ($p < 0.001$) and tamsulosin ($p \leq 0.006$) from month 3 and month 6, respectively. The mean improvement in both storage and

voiding subscores at month 48 was significantly greater ($p \leq 0.01$) with combination therapy than with both monotherapies in men with prostate volume (PV) $30 \leq 58$ cc, and significantly greater ($p < 0.001$) than with tamsulosin in men with PV ≥ 58 cc. For each individual storage or voiding question (except combination vs dutasteride for question 6), mean improvement in score at month 48 was significantly greater ($p < 0.01$) with combination therapy than with either monotherapy.

Conclusions: Combination therapy provides significantly superior and sustained improvements in storage and voiding symptoms compared with tamsulosin irrespective of PV (≥ 30 cc), and compared with dutasteride in men with PV $30 \leq 58$ cc.

doi:10.1016/j.jomh.2010.09.124

ISMH World Congress 2010 Abstract 124

PREVENTION OF THE NEGATIVE PHLEBOLOGICAL INFLUENCE PREVENTION DUE TESTOSTERONE THERAPY OF THE LATE-ONSET HYPOGONADISM

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Introduction. Testosterone therapy (TT) is the main medication in case of late-onset hypogonadism (LOH). Testosterone (T), as a steroids, produces a negative effect on the venous wall, increasing its stretchability. The aim of the study was to determine the negative phlebological influence prevention system during TT.

Material and methods. The study included 32 patients aged 48-60 years (mean 58.3 years) who receives TT. Patients were randomized into 2 groups: Group 1 - the presence of varicose veins of lower extremities (17) and Group 2 - no complicated phlebological history (15). Exclusion criteria: history of arterial/venous thrombosis. Fverage total testosterone was 8.8 ± 3.3 , free - 22.9 ± 5.6 , SHBG - 35.6 ± 16.2 , AMS scale 39.4 ± 7.2 points. There is no statistically significant differences between the groups. Phlebological influence was evaluated clinically (by CVI stage) and duplex ultrasound (DUS) (increase in diameter of great saphenous vein (GSV) for more than 10%, the appearance of reflux in sapheno-femoral junction (SFJ), the increase speed of reflux in an SFJ of more than 10%). Follow-up period was 3 months. DUS performed before TT, then monthly, as well as 2 months after initiation therapy by diosmin if its were needed. The aim of treatment was the improvement / restoration of the initial parameters by DUS, clinical improvement. In the case of registration of changes only when the DC AC used compression therapy only, if clinical deterioration was detected - 2 month diosmin medication was administrate additionally. **Results.** After 1 month a negative trend were in 2 cases in group1, 4 in group2, after 2 months: 4 in group1, 6 in group2, after 3 months: 3 in group1, 3 in group2s. The need for diosmin admission occurred in 4 cases in group1 and 10 in group2. In all cases had reached the goal of treatment. **Conclusion.** In long-term administration of TT should be actively identify possible negative phlebological influence to planning prevention strategy.

doi:10.1016/j.jomh.2010.09.125

ISMH World Congress 2010 Abstract 125

ANALYSIS OF PHARMACEUTICALS SEIZED BY AUTHORITIES IN THE UNITED KINGDOM FOR SUSPICION OF BEING COUNTERFEIT VIAGRA® (SILDENAFIL CITRATE)

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Background: Counterfeit pharmaceuticals pose a significant danger to patient health. Although the size of an illicit market is difficult to estimate, seizures of counterfeit medications, including the phosphodiesterase type 5 inhibitor VIAGRA® (sildenafil citrate), have been increasing in recent years. According to the Medicines and Healthcare Products Regulatory Agency, counterfeit medicine is not typically manufactured in the United

Kingdom (UK), but the UK is a transit point and end user market. Pfizer analyzed pharmaceutical products seized in the UK and suspected of being counterfeit Viagra.

Methods: Pharmaceuticals seized by authorities (including customs, law enforcement, and health agencies) for suspicion of being counterfeit Viagra were forwarded to Pfizer for analysis between May 24, 2005, and July 8, 2009. Samples were subjected to spectral analysis to determine authenticity; high-performance liquid chromatography determined purity and active pharmaceutical ingredient (API) concentration in a subset of samples.

Results: Of 2383 samples seized worldwide, 626 (26%) were from the UK. Of 626 UK samples, only 85 (14%) were authentic. There were 320 samples (51%) that had been ordered through the Internet, of which 264 (83%) were deemed counterfeit. Of 117 samples that were labeled "Viagra 100 mg" and analyzed for API, only 11 (9%) contained sildenafil citrate or a related sildenafil derivative within 5% of the labeled concentration; 40 (34%) contained no sildenafil, 2 (2%) contained $>200\%$ of the labeled concentration. Additionally, 21 (18%) contained only metronidazole as the API, 1 (1%) contained only tadalafil, and 12 (10%) contained both sildenafil and tadalafil. For the subset of 55 Internet-ordered samples that were labeled "Viagra 100 mg" and analyzed for API, 9 (16%) were within 5% of labeled sildenafil concentration and 14 (25%) contained no sildenafil. One sample (2%) contained only metronidazole, another sample (2%) contained only tadalafil, and 3 samples (5%) contained a combination of sildenafil and tadalafil.

Conclusions: Samples seized in the UK for suspicion of being counterfeit were rarely authentic. The majority of samples (51%) were obtained using the Internet, and 83% of these medications were counterfeit. Patients should be warned of the dangers of receiving counterfeit Viagra when purchasing using the Internet.

doi:10.1016/j.jomh.2010.09.126

ISMH World Congress 2010 Abstract 126

INCIDENCE OF ABUSE BY FAMILY CAREGIVERS IN THE AGING MALE POPULATION IN KERMANSHAH, IRAN (2010)

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Introduction: As medical service quality is rising, fatality rate declines. The population of the world, including Iran, is aging. The elderly population is a vulnerable group, and thus the elderly are prone to many health issues. These problems range from-but are not limited to-physical, psychological, financial, and social difficulties; these can jeopardize a potential and meaningful period of life for these individuals. Our study focuses more specifically on family-caregiver mistreatment and abuse toward the elderly. The aim of this paper is to measure the amount of abuse given to male elderly individuals that is given by caretakers. We also attempted to find correlations between various factors regarding the affected and the degree of mistreatment. These factors include physical and psychological health, education, wealth, personality, and appearance.

Materials and Methods: The data for this paper originates from a previous study in which a larger population of both males and females from the city of Kermanshah (in Iran) was surveyed. 135 subjects were randomly picked to complete a survey which consisted of four parts: Part I dealt with demographics, Part II with financial abuse, Part III with physical mistreatment, and Part IV with emotional and psychological abuse. Validity and reliability was measured via alpha-chrobach. We used SPSS software for data gathering and also descriptive and analytic tests (chi-square, Mann-Whitney, ANOVA, and LSD) for analyzing information. The results show that every individual of the 135 people who responded to the survey reported to have experienced some form of mistreatment and/or abuse. Statistical data also revealed that there was no significance of gender difference on mistreatment and abuse. However, this paper focuses solely on the male population, which accounts for 64 of the 135 subjects.