

# International Braz J Urol

## **EDITOR'S COMMENT**

The September - October 2011 issue of the International Braz J Urol presents interesting contributions. The editor's comment highlights some of those papers.

Doctor Esteves and colleagues, from Brazil and USA, summarized the results from the current literature of sperm retrieval as well as the clinical outcome of ICSI in the clinical scenarios of obstructive and nonobstructive azoospermia (NOA). The goals of sperm retrieval are to obtain the best quality sperm possible in adequate numbers for immediate use and/or potential cryopreservation while minimizing the damage to the reproductive tract. Sperm production is normal and gametes can be easily retrieved from the epididymis or testis in cases of obstructive azoospermia (OA). In obstructive azoospermia, the choice of sperm retrieval by method and site of collection should be based upon preferences and expertise since there is no evidence that either percutaneous or microsurgery from either the testis or epididymis affects outcomes of sperm retrieval and assisted reproduction. Conversely, sperm production can be either markedly impaired or absent in men with nonobstructive azoospermia. The reproductive potential of azoospermic men candidates for sperm retrieval and ICSI is related to the type of azoospermia. The chances of retrieving spermatozoa and of achieving a live birth by ICSI are increased in couples whose male partner had obstructive rather than non-obstructive azoospermia.

Doctor Nardoza and colleagues, from Brazil, determined the pattern of blood testosterone concentrations decline with age in a cohort of 1,623 Brazilian healthy military men, aged from 24 to 87 years. The mean testosterone level was 575.5 ng/dL (25.0 to 1308.0 ng/dL). The evaluation of age-related changes in total testosterone levels revealed a progressive reduction in serum levels of this hormone with increasing age. Testosterone levels below 300 ng/dL were reported in 321 participants, a prevalence of nearly 20% in the study population. In agreement with other findings, a reduction of total testosterone levels with age was reported for healthy Brazilian men.

Doctor Deffontaines-Rufin and colleagues, from France, evaluated, retrospectively, the clinical and urodynamical response to the first BTX-A injection of patients suffering from refractory neurogenic detrusor overactivity (NDO) in Multiple sclerosis (MS). A total of 71 patients with MS underwent their first BTX-A injection for refractory NDO. They had clinical and urodynamic cystometry assessment before and 3 months after injection. Seventy seven percent of the patients had clinical improvement or full success of the treatment with a reduction of their urgency and incontinence. About 46% of the patients were in the "full success" group, 31% of the patients had a partial improvement and 23% of the patients had no efficacy of the treatment. Duration of MS was a predictive factor of treatment failure. The author concluded the injection therapy should be considered as soon as oral anticholinergic drugs fail to reduce NDO.

Doctor Pace and colleagues, from Italy, investigated whether specific plasma markers of inflammation and endothelial activation allowed discriminating BPH and PCa. A total of 45 patients were enrolled; 15 affected by BPH, 15 by PCa and 15 controls. Interleukin-6 (IL-6), CD40 ligand (CD40L), endothelial-selectin (E-selectin), platelet-selectin (P-selectin), vascular cell adhesion molecule-1 (VCAM-1) and intercellular adhesion molecule-1 (ICAM-1) were measured. In systemic blood samples, IL-6 has been found increased in patients affected by BPH ( $4.25 \pm 0. \text{ pg/mL}$ ) and PCa ( $5.08 \pm 0.24$ ) respect to controls ( $2.62 \pm 0.34$ ;  $p < 0.05$ ). CD40L was higher in BPH ( $4.25 \pm 0.65 \text{ ng/mL}$ ;  $p < 0.05$ ) than in control ( $2.31 \pm 0.20$ ) and PCa group ( $2.60 \pm 0.56$ ). E-selectin, P-selectin and VCAM-1 did not show any significant difference. Higher levels of ICAM-1 were detected in patients with PCa ( $573.04 \pm 52.23$ )

## **EDITOR'S COMMENT** - *continued*

and BPH ( $564.40 \pm 74.67$ ) than in the controls ( $215.30 \pm 11.53$  ng/mL;  $p < 0.05$ ). In local blood samples, IL-6 has been found significantly increased in PCa in comparison with patients with BPH; there was no difference in CD40L, E-selectin, P-selectin, VCAM-1 ed ICAM-1. Based on their results the authors concluded that changes of inflammation and endothelial activation markers may be not considered of value in discriminating BPH and PCa.

Doctor Lima and colleagues, from Brazil, presented a study to asses the clinical and morphologic characteristics of neuroendocrine carcinomas (NEC) diagnoses in needle core biopsies. The study analyses 7 cases diagnosed on needle biopsies at a large tertiary regional cancer center from Northeastern Brazil. Two pathologists reviewed specimens retrospectively and demographic and morphologic characteristics were compared to 458 acinar tumors diagnosed in the same period. There were 5 small cell carcinomas and 2 low-grade neuroendocrine carcinomas (carcinoid). NEC were associated with an acinar component in 5/7 cases and the Gleason score of the acinar component was always  $> 6$ . The number of cores involved in prostates with NEC was greater (65% compared to 24% of acinar tumors,  $p < 0.05$ ). The mean PSA at diagnosis was 417.7 (range 5.7-1593, SD 218.3), compared to 100.5 ( $p = 0.1$ ) of acinar tumors (range 0.3-8545, SD 22.7). Prostates with NEC tend to be larger and involve a greater number of cores than acinar tumors. PSA at diagnosis does not seem to predict the presence of NE tumors in needle biopsy.

***Dr. Miriam Dambros***  
*Editor in Chief*  
*International Braz J Urol*