

Prostatic Atrophy

The July - August 2010 issue of the International Braz J Urol presents original contributions and editorials from many different countries, such as USA, Germany, France, Brazil, Italy, Taiwan, England, India, Portugal, Venezuela, etc., and as usual, the editor's comment highlights some papers.

Doctor Billis, from Department Pathology, University of Campinas, Sao Paulo, Brazil, presented on page 401 an interesting review article on Prostatic Atrophy, which is a benign lesion that may mimic adenocarcinoma histologically and on imaging. It is more frequent in the peripheral zone and has gained importance with the increasing use of needle biopsies. Diffuse atrophy occurs secondarily to radiotherapy and/or endocrine therapy. Inflammation and/or chronic local ischemia may cause focal atrophy with an increasing frequency in age. Atrophy may be classified morphologically into diffuse and focal. Chronic inflammation associated to focal atrophy (proliferative inflammatory atrophy) has been linked to high-grade prostatic intraepithelial neoplasia and/or carcinoma. This link, however, remains controversial in the literature. The question whether inflammation directly produces tissue damage and atrophy or some other insult induces atrophy directly, with inflammation occurring secondarily, is still unresolved. An intriguing finding that needs further studies is a possible association of extent of atrophy to serum PSA elevation.

Doctor Goo and colleagues, from University of Washington, Seattle, USA, performed on page 464 a study to profile the urinary proteome of women with IC/PBS to identify possible specific proteins and networks associated with interstitial cystitis/painful bladder syndrome (IC/PBS). Urine samples from 10 female IC/PBS patients and 10 controls were analyzed in quadruplicate by liquid chromatography-tandem mass spectrometry on a hybrid linear ion trap-orbitrap mass spectrometer. Alpha-1B-glycoprotein and orosomucoid-1 were detected in all IC/PBS patients, and $\geq 60\%$ of these patients had elevated expression of these two proteins compared to control subjects. The authors concluded that there are qualitative and quantitative differences between the urinary proteomes of women with and without IC/PBS. They also identified a number of proteins as well as pathways/networks that might contribute to the pathology of IC/PBS or result from perturbations induced by this condition. Dr. Tseng, from Chang-Gung University College of Medicine, Tao-Yuan, Taiwan and Dr. Amaro, from Botucatu School of Medicine, Sao Paulo, Brazil, provided editorials on this paper.

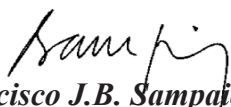
Doctor Botelho and collaborators, from University of Porto Medical School, Portugal, compared on page 430 the serum vascular endothelial growth factor (VEGF) circulating levels across

EDITOR'S COMMENT - *continued*

different prostate pathologies (including benign prostatic hyperplasia, prostatitis, high grade prostate intraepithelial neoplasia and prostate cancer) in patients at high risk of prostate cancer. It was consecutively enrolled 186 subjects with abnormal digital rectal examination and/or total PSA ≥ 2.5 ng/mL. The prostate biopsy main diagnoses were normal or benign prostatic hyperplasia (27.3%), prostatitis (16.6%), and prostatic cancer (55.0%). The median VEGF levels (ng/mL) in these groups were 178.2, 261.3 and 266.4 ($p = 0.029$), respectively, but no significant differences were observed for benign vs. malignant pathologies. The authors concluded that in patients at high risk of prostate cancer, circulating VEGF levels have no clinical role in deciding which patients should be submitted to prostate biopsy. Prostatitis patients, often with higher PSA levels, also present high serum levels of VEGF, and their inclusion in control groups might explain the heterogeneous results in previous studies. Dr. Katia Leite, from University of Sao Paulo, Brazil provided an editorial on this paper.

Doctor Aggarwal and collaborators, from Jaypee University of Information Technology, Solan, India, evaluated on page 480 the antilithiatic properties of *Tribulus terrestris* by investigating nucleation and the growth of the calcium oxalate (CaOx) crystals as well as oxalate induced cell injury of NRK 52E renal epithelial cells. The authors found that *Tribulus terrestris* extract exhibited a concentration dependent inhibition of nucleation and the growth of CaOx crystals. When NRK-52E cells were injured by exposure to oxalate for 72 h, *Tribulus terrestris* extract prevented the injury in a dose-dependent manner. The current data suggests that *Tribulus terrestris* extract not only has a potential to inhibit nucleation and the growth of the CaOx crystals but also has a cytoprotective role and therefore, it could be a potential candidate for phytotherapy against urolithiasis. Dr. Miyaoka, from University of Minnesota, Minneapolis, MN, USA, and Dr. Boim from Federal University of Sao Paulo, provided interesting editorials on this paper.

Doctor Regadas and collaborators, from Federal University of Ceara, Fortaleza, Brazil, described on page 490 a technique for en bloc harvesting of the corpus cavernosum, cavernous artery and urethra from transplant organ donors and contraction-relaxation experiments with corpus cavernosum smooth muscle. The harvesting technique and the smooth muscle contraction-relaxation model described in this study were shown to be useful instruments in the search for new drugs for the treatment of human erectile dysfunction. Drs. Iacono, Tagliatalata and Ruffo, from University "Federico II", Naples, Italy, presented an important editorial on his study.


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