

# International Braz J Urol

## EDITOR'S COMMENT

### Effects of Curcumin in Bladder Tumor

Including original contributions and editorial comments, the September – October 2009 issue of the International Braz J Urol presents contributions from 14 different countries, and as usual, the editor's comment highlights some papers.

Doctor Leite and colleagues, from University of Sao Paulo Medical School, SP, Brazil, studied on page 599 the effects of curcumin in vitro and in vivo using the orthotropic syngeneic bladder tumor animal model MB49. They found that curcumin promotes apoptosis of bladder tumor cells in vitro. In vivo tumors of animals treated with curcumin were significantly smaller as compared to controls. Using immunohistochemistry, it was demonstrated a decrease in the expression of Cox-2 by 8% and Cyclin D1 by 13% in the animals treated with curcumin; both genes regulated by NF- $\kappa$ B and related to cell proliferation. In this study, it was showed that curcumin acts in bladder urothelial cancer, possibly dowregulating NF- $\kappa$ B-related genes, and could be an option in the treatment of urothelial neoplasms. Dr. Brant A. Inman, from Duke University Medical Center, Durham, NC, USA, provided an important editorial comment on this paper.

Doctor Mitterberger and co-workers, from Medical University Innsbruck, Austria, compared on page 532 the detection of urinary stones using standard gray scale ultrasound for diagnostic accuracy using the color Doppler "twinkling sign". They studied 41 patients presenting at least one urinary stone on unenhanced CT evaluation of the kidneys or ureters. Each patient was evaluated using gray scale ultrasound and color Doppler imaging by an observer who was blinded to the CT results. It was found that 77 stones were present in 41 patients. Based upon gray scale sonography the diagnosis of stone was made with confidence in 66% (51/77) of locations. Based upon Doppler sonography using the twinkling sign, the diagnosis of stone was made with confidence in 97% (75/77) of locations. The authors concluded that the color Doppler twinkling sign improves the detection, confidence and overall accuracy of diagnosis for renal and ureteral stones with minimal loss of specificity. Dr. Anup Patel, from the Imperial College School of Medicine, London, UK, provided an editorial comment to this manuscript.

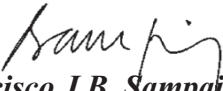
Doctor Nepple and co-workers, from University of Iowa, USA, evaluated on page 559 the concordance in Gleason score and laterality between biopsy and radical retropubic prostatectomy (RRP) specimens and factors that influenced this relationship. It was reviewed 538 prostate cancer diagnoses to identify men with prostate biopsy and RRP specimens. Discordance in Gleason score was defined as any change in Gleason score. A total of 152 men underwent RRP with biopsy showing Gleason < 7 in 56%, 7 in 36%, and > 7 in 8%. Biopsy involvement was unilateral in 59% and bilateral in 41%. Compared to the biopsy, RRP Gleason score was concordant in 76 (50%), higher in 51 (34%), and lower in 25 (16%). Bilateral involvement was concordant in 97%, while unilateral involvement was concordant in only 20%. Both Gleason score and laterality

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

were concordant in only 26%. Gleason concordance was higher in those with 8 or more cores compared to < 8 cores taken (54% vs. 34%,  $p = 0.046$ ), but concordance was not affected by age, PSA, prostate volume, or length of time from biopsy to RRP. During later years, concordance did not improve despite taking more cores. It was concluded that prostate biopsy underestimated prostatectomy Gleason score in 34% of men and bilateral involvement in 80% of those with unilateral disease on biopsy. Taking at least eight cores improves the accuracy of the prostate biopsy.

Doctor Amaro and colleagues, from School of Medicine, UNESP, Botucatu, Brazil, evaluated on page 592 the prevalence and risk factors of fecal and urinary incontinence (UI) in Brazilian women. A total of 685 women older than 20 years of age answered a questionnaire about urinary and fecal symptoms, clinical and obstetric antecedents. They were grouped according to presence or absence of UI. Urinary and fecal incontinence was reported in 27% and 2% of cases, respectively. Mean age of incontinent women was significantly higher than continent ones. Incontinent women had a mean number of micturitions significantly higher than the continent ones. On average, incontinent women had higher rate of pregnancies and vaginal delivery when compared to the continent ones. Body mass index (BMI) was significantly higher in incontinent participants and in women with no UI complaints (27.35 vs. 24.95,  $p < 0.05$ ). Fecal incontinence prevalence was 2% and occurred exclusively in patients with UI. It was concluded that vaginal delivery and high BMI have been identified as risk factors for UI development while aging and number of pregnancies may be correlated factors. Dr. M. Serati, from University of Insubria, Varese, Italy and Dr. Kyle J. Wohlrab, from Alpert Medical School at Brown University, Providence, Rhode Island, USA, provided interesting editorial comments on this paper.

Doctor Shtricker and collaborators, from Tel Aviv Central Consulting Clinic, Israel, analyzed on page 551 the management of mildly elevated (4.0-10.0 ng/ml) prostate specific antigen (PSA) with immediate prostate biopsy, antibiotic treatment, or short term monitoring PSA level for 1-3 months. After studying 135 men, with 65 (48.1%) having received antibiotics (group 1); the PSA levels decreased in 39 (60%) of which, sixteen underwent a biopsy which demonstrated prostate cancer in 4 (25%). Twenty-six (40%) patients of group 1 exhibited no decrease in PSA levels; seventeen of them underwent a biopsy that demonstrated cancer in 2 (12%). The other 70 (51.9%) patients were not treated with antibiotics (group 2); the PSA levels decreased in 42 (60%) of which, thirteen underwent a biopsy which demonstrated prostate cancer in 4 (31%). In the other 28 (40%) patients of group 2 there was no demonstrated decrease in PSA, nineteen of these subjects underwent a biopsy that demonstrated cancer in 8 (42%). It was concluded that it appears to be no advantage for administration of antibacterial therapy with initial PSA levels between 4-10 ng/mL without overt evidence of inflammation. Dr. Noboru Hara, from Niigata University, Japan, Dr. Kenneth G. Nepple & Dr. Terry L. Wahls, from University of Iowa, USA, Dr. Arnauld Villers, from Hôpital Claude-Huriez, Lille, France and Dr. Stacy Loeb, Johns Hopkins Medical Institutions, Baltimore, MD, USA, provided important editorial comments that give balance on this paper.

  
**Francisco J.B. Sampaio, M.D.**  
Editor-in-Chief