International Braz J Urol

EDITOR'S COMMENT

Lower Pole Nephrolithiasis

The March – April 2009 issue of the International Braz J Urol presents important contributions from different countries, and as usual, the editor's comment highlights some papers.

Doctor Arzoz-Fabregas and co-workers, from Instituto Universitario Dexeus, Barcelona, Spain, evaluated on page 140 the efficacy of extracorporeal shock wave lithotripsy (SWL) on lower calyceal calculi in relation to the renal anatomical factors and determine which of these factors can be used to select patients who will benefit from SWL. The authors analyzed retrospectively 78 patients with single radiopaque lower calyceal stones treated with SWL. The patients were evaluated 3 months after lithotripsy with a simple abdominal X-ray and a kidney ultrasound scan. In the follow-up, 39 patients were stone-free, while 39 patients had residual fragments. The authors concluded that lower Infundibular height could be a good measurement tool for deciding which patients with lower calyceal lithiasis would benefit from SWL treatment. Height of less than 22 mm suggests a good outcome from lithotripsy. Dr. Bannakij Lojanapiwat, from Chiangmai University, Thailand, Dr. Udo Nagele, from Tubingen University, Germany and Dr. Ricardo Miyaoka, Dr. W. K. Durfee & Dr. Manoj Monga, from University of Minnesota, USA, well-known experts in lower pole nephrolithiasis, provided important editorial comments on this paper.

Doctor Westphalen and colleagues, from Department of Radiology, University of California San Francisco, USA, retrospectively determine on page 171 the accuracy of T2-weighted endorectal MR imaging in the detection of prostate cancer after external beam radiation therapy and to investigate the relationship between imaging accuracy and time since therapy. The study included 59 patients who underwent 1.5 Tesla endorectal MR imaging of the prostate between 1999 and 2006 after definitive external beam radiation therapy for biopsy-proven prostate cancer. Two readers recorded the presence or absence of tumor on T2-weighted images. It was found that 34 of 59 patients (58%) had recurrent prostate cancer detected on biopsy. The overall accuracy of T2-weighted MR imaging in the detection cancer after external beam radiation therapy was 63% (37/59) for reader 1 and 71% for reader 2 (42/59). For both readers, logistic regression showed no difference in accuracy between those imaged within 3 years of therapy and those imaged more than 3 years after therapy. The authors concluded that T2-weighted endorectal MR imaging has low accuracy in the detection of prostate cancer after external beam radiation therapy, irrespective of the time since therapy. Dr. Adilson Prando, from Vera Cruz Hospital, Campinas, São Paulo, Brazil, and Dr. Ronaldo Baroni, from University of São Paulo, Brazil, provided important and balanced editorial comments on this paper.

Doctor Kim and collaborators, from Chonnam National University Medical School, Gwangju, Korea, assessed on page 183 the factors associated with osteoporosis in Korean men with non-metastatic prostate cancer before undergoing androgen deprivation therapy (ADT). The patients were divided into 2

groups: group I, non-metastatic prostate cancer (n = 42) and group II, benign prostatic hypertrophy (BPH; n = 130). The lumbar bone mineral density (BMD) was evaluated using quantitative computed tomography. The demographic, health status, lifestyle, body mass index (BMI), serum testosterone concentration, and disease variables in prostate cancer (Gleason score, clinical stage, and PSA) were analyzed prospectively to determine their effect on the BMD. The authors found that the risk factors for osteoporosis in men with prostate cancer include a low BMI, and elevated serum PSA. They proposed that monitoring BMD from the outset of ADT would be a logical first step in the clinical strategy to avoid or minimize potential bone-related complications in these patients. Dr. A. M. Brufsky, from University of Pittsburgh School of Medicine, USA, commented the paper.

Doctor Macedo and co-authors, from Federal University of Sao Paulo, Unifesp, Sao Paulo, SP, Brazil, reported on page 205 the technical feasibility of a new approach for creating catheterizable channels in a rabbit model and presented a preliminary clinical experience. The authors configured a tube from 2 rectangular skin flaps 1x4 cm opposite each other in the middle line of the lower inferior abdomen. The channel was anastomosed to the bladder dome with embedding sutures to create a valvular mechanism. The technique proved feasible in all animals, 9 of 12 could be easily catheterized and underwent urodynamic study. No stoma leakage was observed in 7 animals at high bladder pressures (> 50 cm H20) and only 2 animals had some leakage at 40 cm H20. The mean follow-up of the clinical series (3 patients) was 7.2 months. Two patients remained continent up to 4 hours, whereas 1 patient had some leakage after 2 hours. The authors were able to confirm feasibility of a new extra-abdominal channel based on the Mitrofanoff principle and successfully reproduced the method in a clinical setting. Dr. Lorenzo, from Hospital for Sick Children, Toronto, Canada, provided a very important balanced editorial comment on this paper.

Doctor Domingos and co-investigators, from Ribeirao Preto Medical School, USP, SP, Brazil, investigated on page 217 the histological features and biocompatibility of a latex biomembrane for bladder augmentation using a rabbit model. After a partial cystectomy, a patch of a non-vulcanized latex biomembrane (2x4 cm) was sewn to the bladder with 5/0 monofilament polydioxanone sulfate in a watertight manner. Groups of 5 animals were sacrificed at 15, 45 and 90 days after surgery and the bladder was removed. No death, urinary leakage or graft extrusion occurred in any group. All bladders showed a spherical shape. Macroscopically, after 90 days, the latex biomembrane was not identifiable and the patch was indistinguishable from normal bladder. A bladder stone was found in one animal. The authors concluded that the latex biomembrane is biocompatible and can be used in models for bladder augmentation in rabbits. It promotes epithelium and muscle regeneration without urinary leakage. Dr. Tomasz Drewa, from Nicolaus Copernicus University, Bydgoszcz, Poland, and Dr. Stacy T. Tanaka, from Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, Tennessee, USA, provided interesting comments on this paper.

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