TRBP were suspicions of the presence of the PCa at any level of investigation, during DRE, elevated PSA/PSA D or TRUS. In the cases of positive TRPB result, Gleason score was calculated for defining the stage of PCa. We calculated sensitivity and specificity of each procedure using area under curve (ROC-curve analysis) and crosstabs and we also used Spearman's rho coefficient of bivariate correlations for evaluating the strength of associations between diagnostic procedures and positive TRPB result.

Findings: The age of patients varied from 47 to 85 (Mean ± SD =69.2±7.1) years. Among 97 of patients with suspected PCa during DRE 76 (78.4%) resulted in positive TRPB. Average Gleason score among these positive results was 7.6. Of 29 patients with TRUS signs of PCa suspicion, results of the TRBP were positive in 26 (89.7%) with mean Gleason score of 5.9. TRPB positive for PCa resulted in 100 (52.6%) of 190 patients with elevated PSA. Average Gleason score in this group of patients was 3.3. Sensitivity and specificity of the DRE for diagnosing PCa were most optimal among all procedures resulting in 74.5% and 76.9% respectively. Sensitivity of elevated PSA was highest among all diagnostic procedures—98.0%, but specificity was the lowest—1.1%. Lower values of the sensitivity were observed for TRUS (25.5%), but specificity of this procedure was very high (96.7%). Sensitivity for evaluated PSA D was as high as 91.2%, but specificity was too low as 7.7%. Highest levels of correlation were found between positive TRPB and DRE (rho =0.51; P=0.0). Positive TRPB also associated with serum PSA level with strength of 0.43 and with suspicion of PCa by TRUS with rho =0.39. Gleason score correlated with DRE (rho =0.54), with TRUS (rho =0.39), PSA (rho =0.46) and PSA D (rho =0.49).

Conclusions: Unfortunately, even nowadays there no effective noninvasive procedures with confirmed efficacy and available for common use exist for diagnosing of PCa possessing high levels of validity. Transrectal prostate biopsy remains the most valuable diagnostic procedure for PCa. In other hand, such easy-to-do screening procedure as digital rectal examination has not lost its relevance. But at the same time, according to the results of our study, patients with DRE signs of the PCa, has an average Gleason score over 7 thus having potentially aggressive advanced cancer with poor prognosis.

Keywords: Prostate cancer (PCa); routine examination; transrectal prostate biopsy (TRPB)

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AB130. ASC-J9 suppresses renal cell carcinoma progression by targeting an androgen receptor-dependent HIF2α/VEGF signaling pathway

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Abstract: Males have a higher incidence of renal cell carcinoma (RCC) than females, but the reason for this gender difference is unknown. Addressing this question, we report the discovery of an androgen receptor (AR)-induced HIF2α/VEGF signal that drives RCC progression. AR attenuation or augmentation in RCC cells altered their proliferation, migration, and invasion in multiple models *in vitro* and *in vivo*. Mechanistic investigations revealed that AR targeting inhibited RCC cell migration and invasion by modulating HIF2α/VEGF signals at the level of mRNA and protein expression. Interrupting HIF2α/VEGF signals with inhibitors of either HIF2α or VEGF was sufficient to suppress RCC progression. Similarly, the specific AR degradation enhancer ASC-J9 was sufficient to suppress AR-induced HIF2α/VEGF signaling and RCC progression in multiple models *in vitro* and *in vivo*. Taken together, our results revealed a novel role for AR in RCC initiation and progression with implications for novel therapeutic strategies.

Keywords: Renal cell carcinoma (RCC); HIF2α/VEGF signal; cell carcinoma

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AB131. Novel green-light KTP laser en bloc enucleation for nonmuscle-invasive bladder cancer: technique and initial clinical experience

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Background and purpose: The standard procedure for staging and treating nonmuscle-invasive bladder cancer (NMIBC) is still transurethral resection of bladder tumor (TURBT) via a wire loop. However, TURBT is associated with serious disadvantages that facilitate tumor recurrence. Recently, lasers have been explored as treatment tools for bladder tumors. Here, we report a novel tumor en bloc enucleation using a front-firing green-light potassium-titanyl-phosphate laser and its initial clinical application.
Patients and methods: From March through June 2013, 45 patients with NMIBC received modified transurethral resection using a front-firing green-light laser. En bloc enucleation was performed on all tumors. Preoperative and intraoperative data were retrospectively collected.
Results: All patients successfully went through a session of treatment with front-firing green-light laser enucleation of the bladder tumor. Complications such as bladder hemorrhage, vesicle perforation, and obturator nerve reflex were not encountered during the treatment. The tumor diameter ranges from 0.3 to 3.0 cm with a mean value of 1.8 cm. Mean operative time and enucleation time were 21 [12-38] and 12 [4-23] minutes, respectively. Serum hemoglobin decreased 1.1 (0.1-2.4) mg/dL averagely. Mean catheter time was 2.0 (1.0-3.0) days, and mean postoperative hospital stay was 2.5 (1.5-4.0) days. The stages of bladder cancer included 27 Ta, 15 T1, and 3 T2a. No tumor recurrence was observed at the initial 6-month follow-up.
Conclusions: The modified technique using a front-firing green-light laser to en bloc enucleate bladder tumors is effective and safe for treatment of NMIBC. Moreover, it may improve the accurate valuation of tumor stage and prediction of postoperative prognosis, although long-term outcomes and prospective clinical trials are needed.
Keywords: Nonmuscle-invasive bladder cancer (NMIBC); front-firing green-light laser; clinical experience

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AB132. The KAL1 pVal610Ile mutation is a recessive mutation causing Kallmann syndrome

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Objective: To present the clinical, genetic, biochemical, and molecular findings in two Chinese siblings with X-linked recessive Kallmann syndrome (KS).
Design: Case report.
Setting: University medical center.
Patient(s): Two Chinese siblings.
Intervention(s): Clinical evaluation, hormone assays, and gene mutation research.
Main outcome measure(s): Endocrinologic evaluation and

