

of prostate cancer, high grade prostatic intraepithelial neoplasia (HGPIN) and perineural infiltration rates in men who had initial 24-core biopsies and to compare the results with a similar group of men who had initial 10-core biopsy protocol

Material and Methods: We retrospectively reviewed the contemporary maintained prostate biopsy database of men undergoing prostate biopsies for the first time in two referral centers by using the 10 (Group A) and 24 (Group B) biopsy protocols. Indications for biopsy were abnormal digital rectal examination and elevated age specific PSA. Men were stratified according to biopsy protocol and PSA levels. Exclusion criteria were age ≥ 75 years, PSA > 20 or < 2.5 ng/ml and clinical stage more than T2. The Mann-Whitney U and Fisher's exact test were used for statistical analysis.

Results: Between April 2004 and August 2007, 2169 men underwent TRUS prostate biopsies at these two referral centers from which 379 were eligible for the study. Group A (10-cores) consisted of 243 (64.11%) men and group B (24-cores) included 139 (35.89%) men. The overall prostate cancer detection rate was 39.09% and 34.55% in Group A and B, respectively ($p=0.43$). An overall 9.8% increase in Gleason 7 detection rate was found in Group B ($p=0.24$). The HGPIN detection rate in men with negative biopsies was 15.54% and 35.55% in Group A and B, respectively ($p<0.001$). Regarding patients with PSA < 10 ng/ml, the 24-core technique increased Gleason 7 detection rate by 13.4% ($p=0.16$) and HGPIN by 23.4% ($p=0.0008$), compared to the 10 core technique. The 24-core technique increased the concordance between needle biopsy and prostatectomy specimen compared to 10-core technique ($p<0.002$). There were no differences in perineural infiltration rates between both groups.

Conclusions: Initial 24-core biopsy protocol increased the detection of clinically significant prostate cancer, HGPIN and improved the prediction of radical prostatectomy Gleason score in men with PSA < 10 ng/ml. It can be beneficial in a selected group of patients who are candidates for active surveillance.

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Trans-rectal ultrasound guided prostatic biopsy

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Introduction and Objectives: Trans-rectal ultrasound guided prostatic biopsy (TRUSgPB) is the most commonly used system for diagnosis of prostate cancer (PC). The indications are suspicious digital rectal examination (DRE), increased PSA and PSA velocity (> 0.75 – 1.0 ng/dL/yr), low ratio F/T PSA, prior initiation therapy of 5 α -reductase inhibitors, follow-up biopsy (3–6 mo) after diagnosis of high-grade PIN or ASAP, to diagnose failed radiation therapy before use of second-line therapy. The aim of this study was to analyze our rate of PC detection, its Gleason score and volume on biopsy and extracapsular extension (ECE), which are the most important prognostic factors.

Material and Methods: We have analyzed 190 patients retrospectively from 01.09.2008 to 01.06.2009, to whom we have performed extended TRUSgPB with local prostatic block analgesia and oral antibiotic prophylaxis. It was their first biopsy. The average age of the patients was 65.5 years (44–85).

Results: The indications for this procedure were abnormal DRE (98pts-51.57%) and only rising PSA level (92pts-47.89%). Of the 190 biopsies that have been done 86 (44.21%) were with Adenocarcinoma of the prostate results; 67 (35.2%) - Prostatitis chr; 22 (11.5%) Hyperplasia prostatae; 19 (10%) - PIN High grade and ASAP. PC was found in the following age periods: 40–49 years old 3 (1.57%); 50–59 -29 (15.26%); 60–69 62 (32.63%); 70–79 - 68 (35.7%) and over 80 years old -18 (9.47%). The PSA values of 0–4 had 5 patients (7.2%) and 2 pts had ACP-

2.32%; 4–10 -86 pts (45.26%) had ACP 25 pts -29.06%; 10–20 -51 (26.84%) and 27 had ACP -31.39%; above 20 -35pts (18.42%) and 32 had ACP -37.2%. Complications were hematospermia in 62 pts (32.63%); Bleeding from urethra and bladder in 31 pts (16.3%); rectal bleeding in 8 pts (4.21%); fever in 4 pts (2.1%); urosepsis in 2 pts (1.05%).

Conclusions: TRUSgPB is the gold standard for diagnosis of prostate cancer, which is the most common male cancer in developed countries. The use of PSA testing in serum and TRUSgPB allows us to detect the prostate cancer at a potentially curable stage, 5–10 years before giving rise to symptoms and on average 17 years before causing the death of the patient. Massive usage of TRUSgPB and PSA have also led to overdiagnosis detection clinically not significant cancers. Our everyday-task with the help of diagnostic tools, staging procedures and prognostic factors recognizes not only diagnosis of PC nor cases that should not be treated and group of patients who will benefit the most from early and active therapy. It's still a very controversial issue because PC is a histologically heterogeneous and multifocal disease.

S32

Effect of finasteride on the sensitivity of PSA to detect prostate cancer in rebiopsy series

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Introduction and Objectives: According to a secondary analysis on patients enrolled in PCPT, finasteride seems to improve accuracy of PSA in diagnosis of prostate cancer. However, PCPT was designed specifically to evaluate the efficacy of finasteride for chemoprevention of prostate cancer. Our aim is to evaluate, in a prospective study, the diagnostic accuracy of PSA in patients with prior negative prostate biopsy findings who were given finasteride for 6 months.

Material and Methods: We evaluated the diagnostic accuracy of PSA in detecting prostate cancer in rebiopsy series. The study cohort consisted of 91 men with prior negative biopsy findings, including HGPIN and excluding ASAP. All patients were instructed to take finasteride 5 mg daily for 6 months. Prostate biopsy was repeated at 6 months and the findings were compared to the initial results. PSA levels were measured at study onset and after 1, 3 and 6 months. We calculated the ROC curve of PSA under the effect of finasteride for detecting prostate cancer. All patients were evaluated at study onset and after 6 months by clinical examination, digital rectal exploration (DRE), International Prostate Symptom Score (IPSS) and National Institutes of Health Chronic Prostatitis Symptom Index (NHI-CPSI).

Results: The mean patient age was 68 years (66.7–69.4). The mean PSA level was 7.48 ng/ml (6.06–8.89). 84 patients completed the study with rebiopsy; 14 of these patients refused the rebiopsy. 7 were lost to follow-up due to poor compliance. Of the 70 patients, 13 were diagnosed with prostate adenocarcinoma. The median PSA level decreased similarly both in those with prostate cancer and in those without findings of cancer. There was no statistically significant difference between the two groups. The areas under ROC curve (AUC) of PSA at study onset and after 6 months of therapy with finasteride were, respectively, 0.484 (95%CI 0.363 to 0.606) and 0.543 (95%CI 0.420 to 0.663) (Figure 1). There was no statistically significant difference between the two areas.

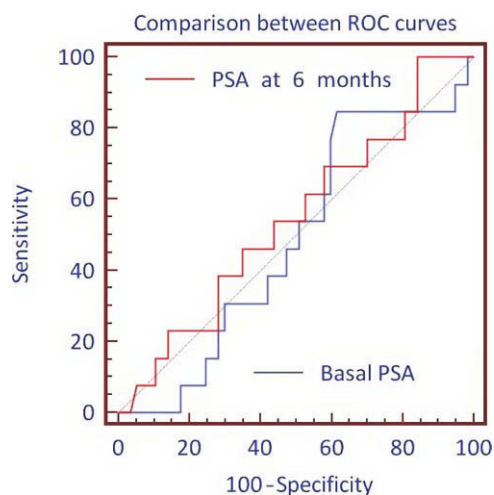


Figure 1.

Conclusions: The results of our study show that PSA itself has a low diagnostic accuracy for detecting prostate cancer in men with prior negative prostate biopsy findings. Finasteride does not improve the accuracy of PSA in this population of patients.

Poster Session 3: Incontinence and overactive bladder
Friday, 9 October 2009, 10:40–12:40
Room 3

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Initial experience with the third generation suburethral sling “TVT secur” not as good as it was expected

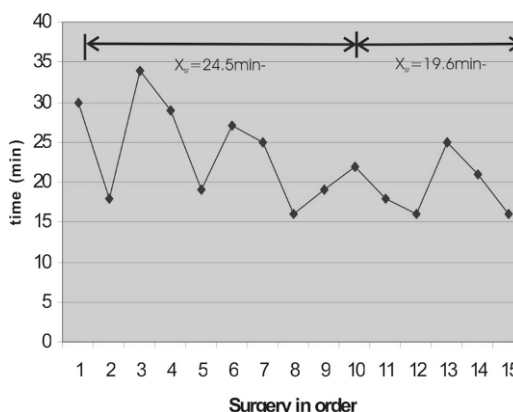
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Introduction and Objectives: Stress urinary incontinence (SUI) is a common clinical problem, that is successfully solved with tension free tapes suprapubic or transobturator. Complications although infrequent, could be life threatening, during the placement of TVT. Residual symptoms after TOT are also common. Residual symptoms deteriorate postoperative quality of life regardless excellent results regarding continence rate (80–90%). The idea of third generation sling is to make surgery less traumatic (single incision), and to pass the shortest possible way in the body and, so minimize tissue trauma and the risk of complications.

Material and Methods: During 2007–2008, sixteen patients with clinically confirmed SUI were operated. “TVT secur”-third generation sling (Johnson & Johnson, Gynecare, Somerville NJ, USA) was used, and placed with “U” technique. The main criteria for patient selection were: clinically confirmed SUI, urethral hypermobility (Qtip >30 degrees) and negative “Barrier” test. The bladder function was confirmed with basic urodynamic data before the surgery (voiding diary, first sensation, bladder capacity, and compliance on dynamic urethrocytostcopy). There was no significant pelvic organ prolapse. Szmptom evaluation was performed with ICIQ/SF questionnaire before and after the surgery. Follow up time was between three and fifteen months (mean 8.3 months).

Results: All patients were operated in LMA (laryngeal mask airway) anesthesia. Time of surgery was progressively shortened from 24.5 minutes, to 19.6minutes. Continence was achieved in 13 out of 16 patients (81.2%). Intraoperative complications were: unintended displacement of the sling (1–7.7%) and bleeding (1–7.7%). Temporary urinary retention occurred in one case (7.7%). Symptom score measured with ICIQ/SF was significantly improved (p=0.000). There was no

postoperative urgency. Postoperative hospital stay was 1.4 days. (See figure.)



Conclusions: Initial success rate with “TVT secur”, in a selected group of patients is high but not as high as we have experienced with TVT and TVT-O. Problem that remains is success rate in cases with SUI and ISD. Safety and short term tape efficiency are the most important problems we are dealing with. It seems that group of patients that are convenient for “TVT secur” must to be more strictly defined. Although complication rate is lower, in comparison with TVT(TOT), this sling type surely must pass the test of time.

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Complications in the use of mid-urethral tapes and transvaginal meshes in the surgical repair of urinary incontinence and and pelvic organ prolapse in the female

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Introduction and Objectives: We present our results in the use of pre-manufactured meshes for the treatment of pelvic organ prolapse and the use of tension-free vaginal tape in the treatment of urinary stress incontinence, with emphasis on the complications and their management.

Material and Methods: Since 2006, 61 patients have undergone surgical repair for pelvic organ prolapse (45 anterior and 16 posterior vaginal wall) with pre-manufactured meshes. For the treatment of urinary stress incontinence, 43 females underwent placement of tension-free vaginal tapes.

Results: The patients were observed from the 1st-6th post-operative months. There was one case of intra-operative puncture of the urinary bladder during the placement of the tension-free vaginal tape, which was managed conservatively. In two patients, urinary retention was observed due to over-correction of the tension free vaginal tape, and was managed with intermittent catheterizations and finally with section of the tape on the 3rd post-operative day. In the one month follow-up, there was one case of Bartholinitis, which was managed conservatively. Also, one patient presented with de novo urinary stress incontinence after cystocele repair, which was also managed conservatively. In the 3rd month a patient presented with vaginal erosion and de novo urinary stress incontinence after surgical repair of a cystocele. In the 6th post-operative month, no new complications were observed. Two cases of recurrent urinary incontinence were noted, with no recurrence of prolapse.

Conclusions: The surgical repair of pelvic organ prolapse and urinary stress incontinence with vaginal wall meshes and tension-free vaginal tapes has proven to be quick and effective. However, like all surgical procedures, they are not free from