

## **66. THE CLINICAL EFFICIENCY OF TRANSRECTAL ULTRASOUND GUIDED BIOPSY IN THE PROCESS OF PROSTATE CANCER DIAGNOSTICATION**

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**Introduction** The incidence of Prostate Cancer(PC) in 2020, in the Republic of Moldova was 28,5 % and the mortality 15,2%, thus the importance of prevention is evident.

**Aim of study.** The early diagnostication of PC provides a better evolution of the disease due to the higher rate of treatment efficacy and less complications. The transrectal ultrasound guided prostate (TRUS-P) biopsy is known to be the golden standard method of diagnosticing prostate cancer.

**Methods and materials** The TRUS-P biopsy was performed on a number of 328 patients from May 2016 until December 2021 in the department of Urology of the Republican Clinical Hospital. The study covers biopsies by core numbers, thus we have 43: 6-core; 44:10-core; 267: 12-core, and 28 patients who overcame polisaturation core biopsies (15,18,20) and others. We examined the PSA level, the age, and the histological interpretations of tissue.

**Results.** The age of the patients in the study was 50 to 90 years old. The minimum PSA level was 0,32 and the maximum level was 177.00 ng/ml, thus the average is 88,66 ng/ml. The diagnosis of Adenocarcinoma was found in 214 patients (56,02 %), the diagnosis of benign prostatic hyperplasia (BPH) was found in 122 patients (31,93%) and in 46 patients (12,04%) the morphological picture of atypical small acinar proliferation (ASAP), that can be suggestive for future PC was found. The 6-core biopsy revealed 24 (55,81%) patients with the diagnosis of Adenocarcinoma, 16 (37,2%) patients with the diagnosis of BPH, and 3 (6,97%) patients with ASAP. The 10-core TRUS-P biopsy identified 28 (63,63 %) patients with Adenocarcinoma, 8 (18,18%) patients with BPH and 8 (18,18%) patients with the diagnosis of ASAP. The 12-core TRUS-P biopsy shows 142 (53,18%) patients with Adenocarcinoma, 94 (35,2%) patients with BPH and the picture of ASAP in 31 (11,61%) patients. The prostate-specific antigen (PSA) average in the patients with Adenocarcinoma is 89,4 ng/ml with the minimum level of 1,18 ng/ml and the maximum level of 177.00 ng/ml. An interval of 0.32-74.00 ng/ml was found in patients with BPH with an average of 37.16 ng/ml. The interval of the PSA level 3,29-44,70 ng/ml with an average of 22.99 ng/ml was found in the patients diagnosed with ASAP. We identified 27 cases of Adenocarcinoma in patients under 60 years old, from 2016-2018: 8 (4.1%) patients and from 2018-2021: 19 (9.94%) patients.

**Conclusion.** Therefore the 10 and 12 core TRUS-P biopsy identifies the ASAP variants in patients more effectively than sextant biopsy. Moreover, the identification rate of PC in patients under 60 years old is increasing.