

in patients with main tumor node in PZ ($1.87 \pm 0.38 \text{ cm}^3$) then in patients with main tumor node in TZ ($9.55 \pm 8.03 \text{ cm}^3$). For adenocarcinoma occupying the 1% of prostate gland volume, probability of pT3 stage is 18%, and in greater tumor volume 10% of probability of pT3 stage increases till 54% (correlating equation $y = 0,0289x + 0,0885$; $R^2 = 0,5434$).

Conclusions: Frequency pT3 stage depends on tumor volume predominantly in patients with adenocarcinoma in PZ, because pT3 stage is connected not only with the tumor volume, but also with its localization – more centrally tumor is localized, less probability of pT3 stage it would have. That is why the main role in staging has tumor volume in PZ. PZ volume in prostate gland is the least variable in older men. Risk of pT3 stage is higher in patients with small prostate gland volume. Results of current research could serve as a base for studying a prognosis of a pathological stage by the biopsy results before patients' distribution on the treatment group.

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Preventive role of postoperatively early introduced intracavernosal PGE1 injections on the development of blood flow disturbances in penis after radical prostatectomy

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Introduction and Objectives: Erectile dysfunction (ED) is a natural sequel of radical prostatectomy (RP). The operation results in apraxia of cavernosal nerves and development of impaired blood flow in penis; these changes tend to progress with time and lead to loss of spontaneous erections and irreversible vascular disturbances in cavernosal bodies. Application of the nerve sparing RP technique and early commencement of pharmacotherapy for ED may limit the development of the above mentioned pathologies. The aim of the study is to evaluate: 1) The incidence and characteristics of hemodynamic changes in penis after RP. 2) The influence of early started pharmacotherapy after RP on blood flow in cavernosal bodies.

Material and Methods: The prospective study comprised 67 preoperatively potent men. The preoperative diagnostics of potency consisted of anaemnesis, IIEF-5 questionnaire and Power Doppler evaluation of blood flow in penis following intracavernosal injection (ICI) of 10 ug of Alprostadil (only potent men – with normal results were enrolled). The Power Doppler study was repeated at 6 weeks and at 6 months after the surgery. At 6 weeks after operation all patients were offered to start the therapy with intracavernosal injections of 10 ug of PGE1 done twice a week, and were trained how to perform the ICI. The ICI-therapy was started and continued by 29 men (43.3%) – group 1. The remaining patients refused or stopped ICI within the study period – group 2.

Results: At 6 weeks after RP correct vascular blood flow, arterial, venous and mixed type of vascular disorders were found in 34 (50.75%), 18 (26.87%), 8 (11.94%) and 7 (10.45%) patients respectively. At this timepoint a significant decrease of mean PSV and RI values was found whereas mean EDV value increased slightly in comparison to the preoperative results. At 6 months after the surgery statistically significant differences of PSV, EDV and RI values were noted between group 1 and group 2. Mean results of Doppler examination for group 1 and group 2 were: PSV – 36.09 cm/s vs. 25.78 cm/s ($p = 0,000001$), EDV – 1.96 cm/s vs. 9.72 cm/s ($p = 0,000001$) and RI – 0.926 vs. 0.613 ($p = 0,000001$) respectively. Correct blood flow was diagnosed in 27 patients (93.1%) treated with ICI (group 1) and 4 (10.5%) men not treated with ICI (group 2). The frequencies of cavernosal vascular disorders in group 1 and group 2 were: arterial – 3.45% vs. 5.26%, venous 3.45% vs. 44.74% and mixed 0% vs. 39.47% respectively. The frequencies of correct blood

flow, venous and mixed vascular disorders in penis differed significantly ($p < 0,05$) between both groups.

Conclusions: 1. In the early postoperative period dominate arterial disturbances, and with the time venous leakage becomes more intense. 2. Early start of ICI-therapy seriously limits the development of hemodynamic dysfunctions in penis after radical prostatectomy

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Minimal-invasive surgery – what do we mean by this? Radical perineal prostatectomy (suprasphincteric) RPP and Transperineal Lymphadenectomy (TPL) as minimal-invasive method of the treatment of prostate cancer. Technique of the procedure and own experience

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Introduction and Objectives: Radical perineal prostatectomy (RPP) was introduced in 1905 by Young. Transperineal Lymphadenectomy (TPL) was introduced by HJ. Keller. Recently there is increasing interest in transperineal approach. The reasons for new interest in this procedure are: better knowledge of pelvic and perineal anatomy, development of new surgical techniques. Radical perineal prostatectomy (suprasphincteric) is characterized by: a very small surgical incision, omitting and preservation of large groups of muscles and blood vessels. RPP provides excellent access to prostate, urethra and neurovascular bundles, very quick postoperative recovery and good cosmetic effect. Operation time is short and performance of vesicourethral anastomosis is very precise, watertight and fast. Procedure is performed successfully even at "difficult" patients (obese, after large abdominal operations, after transurethral prostatic procedures, have large prostatic volume). In addition there is possible to perform lymphadenectomy through perineal incision simultaneously during radical perineal prostatectomy, as is presented in additional movie. The aim of the study is to present results of the radical suprasphincteric perineal prostatectomy and technique of transperineal lymphadenectomy and in addition a schemes, photos and film.

Material and Methods: Authors present the course of the operation and early postoperative period of patients with localized prostate cancer who were submitted to radical perineal prostatectomy. Av. age of patients: 62.5 years (48–75 years), initial PSA: av. 16.2 ng/ml (0.69–76.48), Gleason 5 (1+2 – 4+5), T1-T2b. There was no pathological changes in local lymph nodes.

Results: Operation parameters: time – av. 110 min, median blood loss – 350 ml, % of the nerve-sparing procedures – 23%, Postoperative period: Patient mobilization and oral nutrition – 1th day after operation. Median total hospital stay – 3.8 days. Removal of the urinary catheter – 7–10th day (in ambulatory). Removal of sutures – 10th day (in ambulatory).

Conclusions: Radical Perineal Prostatectomy (suprasphincteric) and Transperitoneal Lymphadenectomy is a valuable treatment method of locally advanced prostate cancer with advantages of low morbidity and short hospitalization. RPP with TPL certainly fulfills requirements of minimal invasive procedure and is characterized by short operating time, good cosmetic results and low percentage of side effects, early patient mobilization and quick start of oral nutrition in comparison to other methods. In opposition to other prostatectomy methods, RPP needs strict cooperation between patient and staff – patient should be profoundly informed about wound hygiene. According to the medical data, proportion of patients with postoperative erectile dysfunction and urinary incontinence is very similar to other methods.