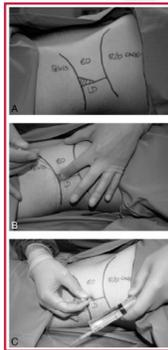
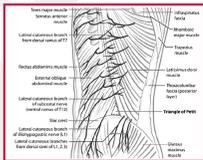


USE OF TRANSVERSUS ABDOMINIS PLANE-BLOCK TO PREVENT PAINFUL URINE BLADDERSPASM AFTER RALP: A PROSPECTIVE, DOUBLE-BLIND RANDOMIZED TRIAL

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Introduction & Objectives:

Patients undergoing a robot assisted laparoscopic prostatectomy (RALP) often experience painful bladder spasms in the early postoperative period (<10hrs). In our institution the incidence of bladder spasm after RALP under general anaesthesia is 64% in the first hours postoperatively.



In a pilot analysis, a reduction of bladder spasms after administering long acting local anaesthetic agents by means of a transversus abdominis plane (tap-block) between start of the general anaesthesia and the start of the procedure of the RALP was observed. Therefore, we initiated a prospective randomized double-blind controlled trial comparing tap-block to no standard anaesthesiology during RALP.

To detect an absolute risk reduction of 31% (based on an spasm rate of 64% in the control group and an expected spasm rate of 33% in the experimental group), a continuity corrected χ^2 test with a 5% two-sided significance level will have at least 80% power when the sample size is 50 patients in each group (total number of patients 100).

Material & Methods:

- 62 men diagnosed with localized prostate cancer, scheduled for RALP participated in the study, after written informed consent was obtained.
- There were no specific exclusion criteria other than obvious reasons like allergies or preliminary ending of the operation or conversion.
- Questions were asked to the patients by the nursing staff 1 and 4 hours after surgery and on the morning after, answering questions about pain (10 point Likert scale), severity of bladder spasms (0, 1,2) and use of butyl scopolamine, oxybutynine and opioids.
- Results were collected and processed by the nurse practitioner urology.
- After processing the anesthesiologist added whether the patients had tap-block or not and analyzed the results

•Results: (N=62)

Preliminary analyses show the following:

- 2 pts were excluded from the trial, one for reason of psychosis and one because of insufficient data.
- 30 pts received the tap-block and 30 men were randomized for standard treatment.
- Median pain score of 2 in the tap-block and 4 in the non tap-block group (range 0-10).
- Median morphine (equivalent) consumption was 7 mg in the standard group whereas it was 0 in the non tap-block group.
- Median bladder spasm severity score observed in the tap-block group was 1 and in the non tap-block it was 2. but the median usage of Oxybutynine consumption was 0 mg in the tap-block and 5 mg in the non tap-block group.

Conclusions:

- Preliminary results show a benefit of local tap-block anesthesia for post-RALP pain
- There is a trend that tap-block reduces bladder spasm severity during the first 24 hours after RALP.
- Prevention of bladder spasms could not be confirmed
- A decrease in use of pain medication was observed in the tap-block group.

