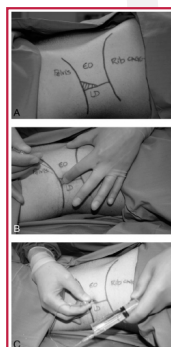
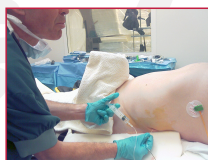
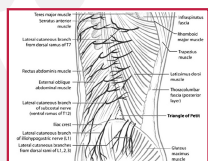


# USE OF TRANSVERSUS ABDOMINIS PLANE-BLOCK TO PREVENT PAINFUL URINE BLADDERSPASM AFTER RALP: A PROSPECTIVE, DOUBLE-BLIND RANDOMIZED TRIAL

## 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  $\chi^2$  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.

