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## LAPAROSCOPIC RADICAL PROSTATECTOMY: A SINGLE CENTER EXPERIENCE

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Minimally invasive techniques including robotic-assisted and laparoscopic radical prostatectomy have become the preferred approach for operative treatment of prostate cancer.

The aim of this study was to evaluate and compare results of laparoscopic radical prostatectomy (LRP) and open retropubic radical prostatectomy (ORRP) for localised prostate cancer, in terms of safety, efficacy and oncological outcome.

A total of 123 radical prostatectomies (RPs) for low-risk localised prostate cancer were performed between January 2016 and June 2019 at the University Clinic of Urology Skopje. Of these, 61 (49.6%) were LRP and 62 (50.4%) ORRP, mean patients' age was 54 years (33 to 67). Indications for operative procedure included: pathohistological finding of prostate cancer, age  $\leq$  70 years, PSA < 10 ng/ml, Gleason score  $\leq$  7 (3+3 or 3+4), negative bone scintigraphy, stage  $\leq$  T2a, N0, M0. All patients were assessed regarding the demographic data, PSA level, Gleason score, operative time, conversion to open surgery for LRP, blood loss, intra and post operative complications, catheter removal, number blood transfusion, hospital stay and oncological outcomes. LRP proved superior to ORRP, resulting in a shorter operating time, less blood loss (p < 0.5), shorter time to resumption of oral intake, shorter postoperative hospital stay (p < 0.5), and less analgesic requirements. In terms of oncological outcomes, we observed less positive margins in the LRP group (p < 0.5). Our results indicate that although both operative techniques represent safe procedures, offering good quality of operation, in our series, LRP was superior in terms of safety, efficacy and oncological outcomes.

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**Key words:** prostate cancer, laparoscopic radical prostatectomy, open retropubic radical prostatectomy