Abstract

Background: Our aim was to compare both the perioperative and the short/medium-term post-operative oncological results after radical prostatectomy between two groups of prostate cancer patients: one group treated with radical retropubic prostatectomy (RRP), the other one with robot-assisted laparoscopic prostatectomy (RALP). Methods: We collected all the clinical, surgical, pathological and follow-up data of the patients who underwent radical prostatectomy with the two different surgical methods in a dedicated database. The positive surgical margins were defined by the presence of disease at the resection margin marked with China ink. The biochemical persistence of disease was defined as a PSA value >0.1 ng/mL 30 days after surgery, while the biochemical recurrence of the neoplasia was defined as a PSA value >0.2 ng/mL. Results: The positive surgical margins (PSM) were identified as follows: 29.3% (RRP) versus 25.4% (RALP) in pT2 cancer (p 0.563), and 63.6% (RRP) versus 50.0% (RALP) in case of >pT2 cancer (p 0.559). If stratified by surgical approach, the results are: 53.3% (RRP) versus 25.6% (RALP) (p <0.001) in case of nerve-sparing technique. The persistence of disease is detectable in 5.4% (RRP) versus 4.6% (RALP), while the data on biochemical recurrence are: 2.7% (RRP) versus 0% (RALP). Conclusions: In our experience, in two groups of patients matched for clinic-pathological features who underwent RRP and RALP, oncological results are slightly better in the second group; this figure is even more significant when evaluating surgeries conducted with nerve-sparing technique. In this study we analyzed data of RALP, recently introduced in our center, comparing with RRP, a surgical technique consolidated through the decades. Therefore it can be said that even during the learning curve, RALP provides oncological results comparable to RRP.