New Approach to Robotic Simple Prostatectomy

Introduction and Objectives: Different approaches such as transperitoneal, extraperitoneal, transvesical percutaneous have been described in robotic simple prostatectomy, for large symptomatic benign prostatic hyperplasia, duplicating the results of open surgery. We describe a new transvesical approach, where we respect the natural bladder support and access the prostatic adenoma through the transperitoneal posterior bladder wall.
Materials and Methods: Since, January 2011, transperitoneal transvesical robotic simple prostatectomy was performed in 4 patients. All patients had symptomatic benign prostatic hyperplasia. Preoperative evaluation included medical history and physical examination, routine laboratory assessment with prostate specific antigen measurement, I-PSS questionnaires, uroflowmetry and transrectal ultrasound with prostate volume measurement; postoperative included operative time, blood loss, days catheterization, drainage and hospitalization, postoperative prostate weight.
Results: We performed 4 transperitoneal transvesical robotic simple prostatectomy approaches without any open conversions. Average SD patient age was 70.25 ± 8.42 years (range 62 to 82), PSA was 10.42 ± 8 ng/ml (range 4.69 to 22.3 ng/ml), US prostate volume was 177 ± 55 cc (range 145 to 260 cc), estimated blood loss was 200 ± 70.71ml (range 100 to 250 ml), operative time was 214 ± 115 minutes (range 90 to 345 min), prostate weight was 110 ± 41 g (range 65 to 160 g), hospital stay was 3.5 ± 2.3 days (range 2 to 7), Foley catheter duration was 11.75 ± 4.85 days (range 7 to 18), drain removal was done at an average of 3.25 ± 1.2 days (range 2 to 5). IPSS pre operative was 19.3 ± 11.54 (range 6 to 26), Qmax pre operative was 15.4 ± 6.5 ml/seg (range 10.8 to 20 ml/seg).
Conclusions: The transvesical transperitoneal approach provides rapid direct access to large prostate adenomas without the need for dissecting the space of retzius. It maintains the normal facial supports of the bladder and prostate. Our initial experience with this approach is encouraging. Further studies are required to confirm its place in the management of large volume adenomas.

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