

CONTINENT ORTHOTOPIC URINARY DIVERSION. FUNCTIONAL AND ONCOLOGICAL RESULTS.

Hypothesis / aims of study

Radical cystectomy is a surgical technique with wide variability, despite being the standard treatment for muscle invasive bladder cancer this technique has high rate of complications and reduced quality of life. The continent orthotopic urinary diversion (neobladder) is a surgical technique that has proven its viability in selected patients trying to preserve urinary anatomy and physiology. Our goal is to present functional and oncologic results.

Study design, materials and methods

We performed a retrospective review of a total of 218 patients treated in our department with laparoscopic radical cystectomy in the period from 2005 to 2012. Statistical analysis was done by the biostatistics section of our institution. In 47 cases (21.5%) we decided, using clinical aspects, to perform continent orthotopic urinary diversion by mini-laparotomy in most cases. In addition to demographic data such as age and background, we evaluated functional results: Diurnal continence, nocturnal continence were archived with the pad test 3, 6 and 12 months after surgery. Need for self-catheterization and sexual function. Survival was determined by Kaplan-Meier analysis.

Results

The average age is 57 years. The continent orthotopic urinary diversion techniques performed were: Hautmann 40.4%, Camey II 14.8%, Laparoscopic Camey II 2.12%, Mainz I 2.12%, Mainz II 6.42%, Studer 8.5%, Neobladder + prostatic capsule sparing 25.1%. The functional results obtained were: daytime continence without pads preserved in 81.5%, nocturnal continence: 77.8%. 88.9% of cases do not need bladder catheterization. Sexual function is preserved in 47.1%. Notably, in the group of patients treated with prostate capsule sparing technique achieved day and night continence close to 90% and sexual function in 88% of cases treated with medication. Documented oncological survival is similar to other series.

Interpretation of results

Clearly, cystectomy is one of the most important and aggressive surgeries in the field of urology. In our series, we have excellent functional results, evaluated 1 year after surgery. The performance of urinary orthotopic diversion in well selected patients leads to a better quality of life in patients with muscle invasive bladder cancer. Despite the controversy, we emphasize the sparing prostatic capsule technique as reliable technique in experienced surgeons. Provided that the same oncologic criteria used in open surgery are applied, laparoscopic radical cystectomy does not result in a step backwards in terms of treatment of the disease. Time is needed to analyze long term results.

Concluding message

In our department, laparoscopic radical cystectomy is the treatment of choice for invasive bladder cancer. The continent urinary diversion should be considered in carefully selected patients and is feasible in experienced departments with good functional and oncologic results.

References

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Disclosures

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