Complications and Mortality Rates Post Radical Cystectomy with Orthotopic Urinary Diversion

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Objectives: Radical cystectomy with urinary diversion has been the standard treatment to infiltrative bladder neoplasms. We evaluate the complications, morbidity, and mortality rates after radical cystectomy with orthotopic diversion aiming to improve the outcome after this major surgery.

Materials and Methods: During the period of March 2010 to July 2011, prospective study as radical cystectomy with neobladder were performed in our department on 22 patients. We have analyzed age, gender, pathological staging, type of diversion used, surgical time, need for blood transfusion and blood volume used during surgery, immediate complications (1 to 30 days), late complications, and follow-up time.

Results: There were 17 men and 5 women. Mean age was 55 years (28 to 65), and the majority of the group was over 50 years (86%). Mean follow-up time was 9 months (3 to 18). Ileal neobladder was used in 16 (72.7%) cases, sigmoid neobladder in 6 (27.3%) cases. Blood transfusion more than three units were required in 2 (9%) cases. Histopathological types were TCC in 13 (59%) cases, and SCC in 9 (41%). The most pathological staging were observed are T2N0 in 9 (41%). Mean surgical time was 5h 26 min (255 to 420 min). Early mortality (30 days postoperative) were observed in 4 (18%) cases in form of hepatic encephalopathy in 1 case, cardiogenic shock in 1 case, severe metabolic acidosis in 1 case, and fecal fistula and sepsis in 1 case. Late mortality (6 month postoperative) was observed in 1 (2%) case in form of recurrent pyelonephritis and sepsis. Over all complications were observed in 8 (36%) cases. Intraoperative complications were observed in 2 cases in form of rectal injury. Immediate postoperative complications were observed are ileus in 3 cases, bowel leak and fecal fistula in 2 cases, DVT in 1 case, wound infection in 4 cases, wound dehiscence in 3 cases, and urine leak in 1 case. Late postoperative complications were observed are ureterointestinal anastomosis stricture in 1 case, Pouch stone in 1 case, and pyelonephritis in 4 cases. Total incontinence in 1 case, bed wetting in 2 cases, and diurnal in 2 cases. LN metastasis in 4 cases and liver metastasis in 1 case. No any case or recurrence detected.

Conclusion: orthotopic neobladder reconstruction requires complex surgery but has an acceptable early and late complication rate in properly selected patients. It provides satisfactory continence without compromising cure rates. Key words: bladder; bladder neoplasms; cystectomy; morbidity; postoperative complications.