## **ABSTRACT**

Patients and methods: Twenty five bladder cancer patients were operated in the NCI, Cairo University, during the period starting from February 2005 till October 2013. They were chosen according to specific selection criteria including: T2-T3 bladder cancer, adequate anal continence, serum creatinine level less than 1.5 mg/ml and bilateral normal upper urinary tract on intravenous pyelography. Patients had sigma pouch urinary diversion post radical cystectomy .16 patients out of the 25 had the traditional sigma pouch and the remaining 9 patients had serous lined technique of sigma pouch.

Results: Our study included 15 males (60%) and 10 females (40%). Their median age was 56.5 years (range: 41-67). Fourteen patients had transitional cell carcinoma and 40% had squamous cell carcinoma. The mean operative time was 209 minutes and the mean post-operative stay was 8 days. Early post-operative complications were seen in 40% mainly in the form of sepsis and acidosis while late post-operative complications were observed in 50 % and mainly in the form of back pressure changes. Three mortalities occurred during the early post-operative period. All patients had adequate continence from the first week. There were no statistical differences between the 2 forms of sigma pouch regarding early and late post-operative complications.

**Conclusion:** Mainz II pouch (traditional form or serous lined form) is a convenient continent diversion post radical cystectomy characterized by being stoma free with good continence rate.

**Keywords:** Bladder cancer - radical cystectomy - continent diversion-Mainz II pouch - sigma pouch - serous lined sigma pouch.