Extraperitoneal Retrograde Radical Cystectomy (RC): the Ideal Approach for Octogenarians with Invasive Bladder Cancer (BC) Who Need Surgery: Long-Term Outcomes

Introduction and Objectives: To evaluate morbidity, overall (OS) and disease-specific survival (DSS) of RC in octogenarians according to surgical approach (peritoneal vs extraperitoneal), ASA score, and type of urinary diversion in the long term.

Materials and Methods: From 2000 to 2007 105 pts 80 year-old or older received RC and urinary diversion for BC at our institution. The mean age was 83.2 years: 73 men and 32 women. There wre 88/105 (83.9%) pts who had one or more co-morbidities. ASA score was used for classifying preop. Risk; 21/105 (20%) were ASA 2, 55/105(52.4%) ASA 3 and 29/105 (27.6%) ASA 4. There were 40/105 pts (38%) who received RC+limphadenectomy through a peritoneal approach while 65/105 pts (62%) had an extraperitoneal retrograde RC. There were 53/105 (50.5%) who had ureterocutaneostomy (UCS) as diversion while 38/105 (36.2%) had Bricker, and 14/105 pts (13.3%) had an orthotopic neobladder. Pathological stage was: Recurrent Tis+T1 in 11/105 pts (10.4); T2b in 15/105 (14.3%); T3a in 24/105 (22.8%); T3b in 37/105 (35.2%); T4 in 18/105 (17.1%). There were 23/105 patients (21.9%) who were N+(pT3-T4). There were 81/105 patients (77.2%) in the intensive care Unit for 1-6 days, and 51/105 patients (48.6%) were transfused

Results: The mean follow-up was 46.5 months (24-96 months). Perioperative mortality was 8.5% (9/105). Mean hospital stay was 14.5 days (7-35 days). The complication rate (medical and surgical) was 36%. 8.3% of patients required a second operation. Medical and surgical complications by ASA were: ASA2 =11.8%, ASA 3= (50%), ASA4 = 38% respectively. The medical complication rate by surgical approach: extraperitoneal 40.4%, peritoneal 27%. Surgical complication rate was:12.8% with extraperitoneal route vs 29.7% with a peritoneal approach. Re-operation Rate: Extraperitoneal = 0.9% vs 7.6% peritoneal. Mean Blood loss was: 380 cc in extraperitoneal approach vs 780 cc with the peritoneal one. Complications according to diversion: Medical = 45% for UCS vs 34.5% in Bricker vs 39.5% orthotopic. Surgical complications 24% UCS vs 34.5% Bricker vs 37% orthotopic. Re-op rate: UCS = 0 vs 17% in Bricker vs 7.1 in orthotopic, and 82 pts had regular long-term follow-up. After 1 year OS was 60%, after 2 years was 43.6% after 3 year 39.9%. DSS was 63.3% after 1 year and 51.2% after 2 years and 50% after 3 years. No difference in survival was seen between the extra or peritoneal approach.

Conclusions: The results of our study support the use of RC in octogenarians. Mortality and complications were acceptable. Mayor complications was correlated with high ASA score (3-4), urinary diversion (Bricker) and surgical approach (peritoneal route).