

## **Robotic and Open Cystectomy for Urothelial Carcinoma in Octogenarians**

**Introduction and Objective:** The prevalence of bladder cancer is increasing among octogenarians as this population continues to increase in size. Elderly patients are often assumed to have an increased surgical risk and thus are frequently not offered radical extirpative surgical options. Here we present our single institution experience and perioperative outcomes with radical cystectomy for urothelial carcinoma in an octogenarian patient population.

**Materials and Methods:** A total of eighteen patients of age eighty or older underwent radical cystectomy between 2008 and 2012 by a single surgeon. Nine patients underwent robotic assisted laparoscopic radical cystectomy (RALRC) and nine underwent open radical cystectomy (ORC). Ileal loop urinary diversion was performed in all patients. Demographic, operative, perioperative, and complications data were collected prospectively and analyzed.

**Results:** The average age and ASA score for the RALRC and ORC groups were comparable (82 years and 3). There were four female and five male patients in the RALRC group and three female and six male patients in the ORC group. The average operative time for the RALRC and ORC was 236 min and 253 min respectively ( $p=0.76$ ). Estimated blood loss (EBL) was significantly lower in the RALRC group (175 cc) when compared to the ORC group (461 cc) ( $p=0.004$ ). Similarly, length of stay (LOS) was also significantly less in the RALRC group (6 days) in comparison to the ORC group (14 days) ( $p=0.04$ ). Four of nine patients undergoing ORC required placement into a rehabilitation facility and one of nine from the laparoscopic group required rehabilitation facility admission. The RALRC group had one case of prolonged ileus. The ORC group had one patient with DVT and one death from respiratory distress secondary to sepsis.

**Conclusions:** Radical cystectomy as a treatment option for invasive urothelial carcinoma is a feasible option in octogenarians. Due to a higher prevalence of medical comorbidities in the octogenarians, RALRC may be superior to ORC as a extirpative surgical treatment option and may lead to lower EBL and a shorter LOS. Larger studies with longer follow-up times are needed to further validate these observations.