Training Course on Radical Cystectomy and Urinary Diversion: Does It Add to the Burden on Patients?

Introduction and Objective: Whether performing live surgery during training courses under stress of time, audience questions, observations and comments has negative influence on surgeon performance and consequently surgical outcome or not? In this study, the surgical and oncological outcome in patients underwent radical cystectomy (RC) and urinary diversions (UD) during training courses held in a single institution were assessed.
Materials and Methods: Data files of 53 patients who underwent RC over 12 courses held between 2004 and 2011 were retrospectively reviewed. Demographic and peri-operative data were analyzed. Early and late post-operative complications were stratified according to modified Clavien classification. Number of re-admissions, secondary interventions and patients' survival were reported. Analyzed data of training group (TG) were compared with those of 46 patients (non-training group NTG) which underwent RC in consecutive weeks to training courses.
Results: Patients' demographics and tumor characteristics were comparable; however, ileal loop conduit was fewer in TG group (10% vs. 28%; p= 0.04). Early postoperative complications were lower in TG (19 % vs. 43%; P= 0.007). Post operative fever (grade I) was the most frequently reported complication in both groups (33%). Significant blood loss was less in TG group (7.5% vs. 24%; p= 0.023); however, there was no difference in blood transfusion rates (30% vs. 26 %; p=0.4). One patient died in NTG due to pulmonary thromboembolism. No difference was detected between groups in late complications (11% vs. 13%; p=0.5). Adhesive intestinal obstruction was the most common cause for re-admission (6%). Logistic regression analysis demonstrated that TG cases was the only predictor for fewer early post operative complications (P= 0.003; 95% Confidence interval= 0.08 - 0.58). At mean follow up ± SD (40±5 months), log rank analysis demonstrated comparable overall survival between two groups (77% vs. 66%, p=0.8).
Conclusions: Patients undergoing RC in training courses have lower postoperative complications than those undergoing RC during routine practice. It seems that live surgeries during training courses do not have negative impact on surgical nor oncological outcomes.