

Risk factors of postoperative complications after radical cystectomy with continent or conduit urinary diversion in Armenia

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Abstract

To estimate the surgical volume and the incidence of in-hospital complications of RC in Armenia from 2005 to 2012, and to investigate potential risk factors of complications. The study utilized a retrospective chart review in a cohort of patients who had RC followed by either continent or conduit urinary diversion in all hospitals of Armenia from 2005 to 2012. A detailed chart review was conducted abstracting information on baseline demographic and clinical characteristics, surgical procedural details, postoperative management and in-hospital complications. Multivariable logistic regression analysis was applied to estimate the independent risk factors for developing 'any postoperative complication'. The total study sample included 273 patients (mean age = 58.5 years, 93.4 % men). Overall, 28.9 % (n = 79) of patients had at least one in-hospital complication. The hospital mortality rate was 4.8 % (n = 13). The most frequent types of complications were wound-related (10.3 %), gastrointestinal (9.2 %) and infectious (7.0 %). The ischemic heart disease (OR = 3.3, 95 % CI 1.5–7.4), perioperative transfusion (OR = 2.0, 1.1–3.6), glucose level [OR = 0.71 (0.63–0.95)], and hospital type (OR = 2.3, 95 % CI 1.1–4.7) were independent predictors of postoperative complications. The rate of RC complications in Armenia was similar to those observed in other countries. Future prospective studies should evaluate the effect of RC complications on long-term outcomes and costs in Armenia. Policy recommendations should address the issues regarding surgeon training and hospital volume to decrease the risk of RC complications.

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