Outcome of Penile Prosthesis Surgery in Patients with Significant Comorbidity

Introduction and Objective: Patients with significant comorbidity constitute the greater portion of our penile prosthesis implantation. We evaluated the outcome in those patients.
Materials and Methods: Penile prosthesis surgery (from 2000–2011) performed by a single surgeon (SK) were reviewed retrospectively. We identified the underlying systemic or local disease in all patients. Charlson comorbidity score was calculated for patients with systemic disease. Patients with local penile disorders were evaluated separately. The end point of comparison was prosthesis survival duration. One way ANOVA and descriptive statistics using Pearson Chi-square test were used.
Results: A total of 145 procedures on 92 patients were carried out; of these 40 were in 21 patients with penile pathology (peyronie's disease, ischemic priapism, paraplegia, penile reconstruction surgery and urethroplasty). The median age was 31 (22-73). Of these 15 primary insertions, 13 exchanges for infection (6), malfunction (4) and perforation (3) and 6 secondary insertions were carried out. Twenty-one procedures were uneventful (52.5%); 11 (27.5%) infections, 6(15%) removals, 1 perforation and 1 malfunction. The median duration of prosthesis survival was 679 days (8-3614). A group of 105 procedures were carried out in 71 patients who were healthy or had a systemic disease (DM, cardiovascular, renal impairment , treated cancer of the bladder or prostate). The median age was 63(29-80) yrs. Overall median prosthesis survival was 966 days (5-4332). The median Charlson comorbidity score for that group was 5. No significant difference in outcome was observed in 62 procedures in patients with a score ≥ 5 (34 uneventful and 14 infections), compared to 43 procedures in patients with a score <5 (28 uneventful and 5 infections; p= 0.6). However, patients with ≥5 score were significantly older (mean age 66.7 SD 6.4 vs. 49.6 SD 12.8 yrs; p<0.001) and had a shorter prosthesis survival (mean 994.1 SD 978 vs. 1576.6 SD 1229.9 dys; p=0.01)
Conclusions: Nearly half the penile prosthesis surgeries in patients with significant penile pathology have an uneventful outcome. Patients with significant systemic comorbidities have shorter prosthesis survival.