Learning Curve for Robotic Assisted Radical Prostatectomy (RARP): MPUH Experience

Introduction and Objective: In this study we analyzed our learning curve of RARP in the first 63 consecutive cases.

Materials and Methods: Between Oct 2010 and Nov 2011, 63 consecutive patients were classified into Group 1 (Cases 1-30) or Group 2 (Cases 31-63). Pre-operative clinical characteristics, operative and postoperative parameters were assessed. Console time was defined as commencement of procedure between docking and undocking. Continence was defined as leak-free and pad-free status. Histopathological reporting was done by single pathologist. P value <0.05 was considered statistically significant. In all patients per urethral catheter was removed on 6^{th} day following cystogram. **Results:** Significant differences were found in vesicourethral anastomosis (Van Volthoven tech) and time (49 min for Group 1vs 35 min for Group 2, P < 0.05). The continence rate at 3 months in Group 2 was higher than that in Group 1 (86.4vs. 78.4 % p = 0.05). Mean duration to continence was shorter in Group 2 than Group 1 (76.32 \pm 60.37 days vs. 42.63 \pm 36.38 days, p = 0.05). Hospital stay was comparable in both the groups (7.2 vs. 7.6). Positive surgical margin of: pT2 (14.6% for Group 1 to 6.5% for Group 2) and pT3 (72% for Group 1 to 60.2% for Group 2). Mean age, pathological staging was comparable in both the groups. Console time was shorter and blood loss was reduced in Group 2 compared with Group 1. **Conclusion:** RARP had definite learning curve, after which vesicourethral anastamosis becomes faster, continence improves and chances of positive surgical margins decreases.