Comparison of Continence Status in Patients Underwent Open Surgery, First or Second Generation Robotic Radical Prostatectomy

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Keywords:
Continence status
Radical Prostatectomy

Introduction
Radical prostatectomy is the first-line treatment for prostatic cancer. After few decades of evolution, it has progressed from open surgical procedure to robotic operation. A retrospective study was recently conducted to review the continence status of patients underwent open, first or second generation robotic radical prostatectomy.

Objectives
To retrospectively evaluate and compare the continence status of patients underwent open, first or second generation robotic radical prostatectomy.

Methodology
All patients underwent radical prostatectomy from 1996 to 2016 were recruited:
1. Open surgery -1996-2005
2. Robotic surgery (1st generation) – 2006-2011
3. Robotic surgery (2nd generation) –2012-2016

Three groups of patients have attended the urology nurse clinic at the 3rd, 6th & 12th month post-operatively for their continence status. Number of pads used per day was counted. Data was collected and their progress could then be reviewed.

Result
At 3rd month visit, 68 patients (OS) was recruited, 38(55.9%) have used 0-1 pad daily, 18(26.5%) have used >1 pads daily while 12(17.6%) have used napkins. Within the 160 patients (RS1), 97(60.6%) have used 0-1 pad, 49(30.6%) have used >1 pads while 14(8.8%) have used napkins. Within the 191 patients (RS2), 129(67.5%) have used 0-1 pads, 59(30.9%) have used >1 pads while 3(1.6%) have used napkins.

Somer’s D=-0.107; p-value=0.011

At 6th month visit, 69 patients (OS) was recruited, 51(73.9%) have used 0-1 pad daily, 12(17.4%) have used >1 pads daily while 6(8.7%) have used napkins. Within the 156 patients (RS1), 114(73.1%) have used 0-1 pad, 35(22.4%) have used >1 pads while 7(4.5%) have used napkins. Within the 180 patients (RS2), 140(77.8%) have used 0-1 pads daily.
At 12th month visit, 66 patients (OS) was recruited, 61(92.4%) have used 0-1 pad daily, 5(7.6%) have used >1 pads daily while 0(0%) have used napkins. Within the 153 patients (RS1), 134(87.6%) have used 0-1 pad, 16(10.5%) have used >1 pads while 3(2.0%) have used napkins. Within the 158 patients (RS2), 135(85.4%) have used 0-1 pad, 21(13.3%) have used >1 pads while 2(1.3%) have used napkins.

Conclusion:
At 3rd month visit, there is significant difference between the three groups and obviously patients underwent the second generation robotic surgery have achieved a better continence control by using less napkins. At 6th month visit, the data is statistically not significant but an improving trend could be noted as all three groups of patients are using lesser napkins as before. At 12th month visit, all patients have achieved good continence control after one year. Though there is not much statistical difference between the three groups, it is obvious that surgeons have improved and advanced their robotic techniques after years of experiences.