

Patient Reported Outcomes (PRO) after Robotic Radical Prostatectomy (RRP): Improving Patient Counseling and Shared Decision-Making

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Abstract

Patient Reported Outcomes (PROs) are great instruments to help patients and physicians in the treatment shared decision-making process. The objective of our study is to assess the PROs in patients before and after Robotic-assisted Radical Prostatectomy (RRP). Forty-four patients were included and prospectively followed, applying EPIC-26 before treatment and at 6 months, generating a scale of 0-100, with higher scores representing better QoL. EPIC-26 identified worsening HRQOL in Urinary Incontinence and Sexual domains. EPIC-26 questionnaire may be institutionally used to help patients in the decision-making process before the treatment of localized prostate cancer.

Introduction

Robotic-assisted Radical Prostatectomy (RRP) has been one of the most frequent surgical option for patients diagnosed with localized prostate cancer (LPC). In the era of shared decision-making, preoperative counseling discussing the most likely outcomes and scenarios is crucial to satisfy patients' expectations. Therefore, Patient-Reported Outcomes (PROs), measurements based on patient reports by validated scales, assessing patient-centered parameters, are great instruments to help patients and physicians in the treatment shared decision-making process. The objective of our study is to assess the PROs in patients before and after RRP.

Methods

Patients with treatment naïve LPC who underwent RRP were enrolled in this prospective cohort study. Before the treatment decision, the Expanded Prostate Cancer Index Composite (EPIC-26), a validated questionnaire that measures health-related QoL was applied to all patients at baseline and at 6 months to all patients. The EPIC-26 questionnaire includes 26 items and evaluates 5 different health-related quality of life (HRQOL) domains (Urinary Incontinence, Urinary Irritative/Obstructive, Bowel, Sexual, and Hormonal). Response options for each EPIC item form a Likert scale, and multi-item scale scores are transformed linearly to a 0-100 scale, with higher scores representing better QoL.

Table 1: EPIC-26 Global Score for patients at baseline and at 6 months.

Domain Summary Scores	EPIC26 Global Score Average [95 CI]		
	Baseline	6-month	P value
Urinary Incontinence	97.21 (94.75 – 99.67)	82.96 (74.6 – 91.3)	<0.001
Urinary Irritative/Obstructive	87.15 (82.73 – 91.57)	90.50 (84.6 – 96.3)	0.37
Bowel	94.50 (90.72 – 98.29)	93.95 (89.70 – 98.21)	0.84
Sexual	70.01 (61.51 – 78.52)	44.21 (30.62 – 57.80)	0.003
Hormonal	89.88 (85.85 – 93.92)	93.5 (89.65 – 97.34)	0.27

Results

Forty-four patients were included and prospectively followed. The median age and PSA at diagnosis were 64 years-old (47 – 78) and 8.5 ng/mL (5.0 – 20.0). At baseline the worst HRQOL domain were Sexual, 70.01 (61.51 – 78.52) and Urinary Irritative/Obstructive, 87.15 (82.73 – 91.57). At 6-months, there were statistically significant differences two HRQOL domains: Urinary Incontinence, from 97.21 to 82.96 ($p < 0.001$) and Sexual, from 70.01 to 44.21 ($p = 0.003$). Despite a numerical difference in Urinary Irritative/Obstructive HRQOL, from 87.15 to 90.50 ($p = 0.37$), respectively, this difference is non-statistically significant ($p = 0.37$).

Conclusion

After RRP, the EPIC-26 was capable to identify worsening HRQOL in Urinary Incontinence and Sexual domains. EPIC-26 questionnaire may be institutionally used to help patients in the decision-making process before the treatment of LPC. Long term follow up is necessary to evaluate HRQOL improvement from surgery over time, in addition to evaluate radiation therapy outcomes as well.