

Patient Reported Sexual and Urinary Functional Outcomes in Men with Intermediate Risk Prostate Cancer Undergoing Radical Prostatectomy: Analysis of the MUSIC Registry

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INTRODUCTION AND OBJECTIVE: To assess patient reported continence and sexual function outcomes among men with intermediate risk prostate cancer (IRPC) undergoing radical prostatectomy (RP) in MUSIC.

METHODS: We reviewed the Patient Reported Outcome program in the MUSIC prostate cancer registry for men with IRPC undergoing RP from May 2014-- to June 2021. EPIC-26 surveys are administered at baseline and 1, 3, 6, 12, and 24 month postoperatively. To quantify deterioration in function resulting from surgery, patients were included in this analysis if they report good urinary and/or sexual function at baseline. Social continence (SC) was defined as self-reported use of 0-1 pad per day and assessed at 3 and 6 months postoperatively. Good sexual function (SF) was defined as erections firm enough for penetration and assessed at 12 and 24 months postoperatively. Proportions of patients with social continence and good sexual function were compared between favorable (F-IRPC) and unfavorable (U-IRPC) with the Chi-squared test. Surgeon level variation was assessed graphically.

RESULTS: Among 3967 patients undergoing RP for IRPC, 2911 and 2614 patients with good baseline urinary function completed the 3m and 6m surveys and 984 and 666 patients with good baseline sexual function completed the 12m and 24m surveys. Post-operative SC was reported in 67% and 86% of patients at 3m and 6m. We noted similar SC for men with F-IRPC and U-IRPC at 3m (68% vs. 67%, $p=0.61$) and 6m (86% vs. 85%, $p=0.74$) postoperatively. Recovery of SF was less robust, with 26% and 30% of men reporting good SF at 12m and 24m postoperatively. Men with F-IRPC had improved SF at 12m compared with men with U-IRPC (30% vs. 24%, $p=0.031$), although this difference was not statistically significant at 24m (34% vs. 28%, $p=0.064$). There was notable variability in recovery of SC and SF by contributing surgeon for both men with F-IRPC and U-IRPC. (Figure)

CONCLUSIONS: As reported in MUSIC PRO, men with IRPC had reasonable urinary continence recovery postoperatively overall, but generally poor recovery of erectile function, with notable variation in postoperative urinary and sexual function by surgeon. These data may inform patients and surgeons regarding the range of expected outcomes as well as drive future quality improvement efforts. Figure. Surgeon level variability in the proportion of patients reporting social continence at 3 months and erections firm enough for intercourse at 12 months for men with favorable and unfavorable intermediate risk prostate cancer undergoing radical prostatectomy. The size of the bubble corresponds with the volume of prostatectomies performed by the surgeon. Surgeons were included only if they had >10 patients meeting each of the entry criteria.

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