MP29-12: Impact Of A Men's Health Clinic On Erectile Function Following Radical Prostatectomy

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INTRODUCTION

- Improving sexual function after prostatectomy has been shown to have a significant impact on patient reported quality of life (QOL). [1]
- The rate of erectile dysfunction (ED) after prostatectomy is 60-90%. [1,2]
- Men with ED experience depression and anxiety, avoid sexual relationships, and are reluctant to report symptoms or seek additional treatment. [3, 4, 5]
- A men's health clinic (MHC) for patients undergoing radical prostatectomy was started in 2010 at our institution to improve post-operative QOL.
- The effect of a prostatectomy specific MHC has not been adequately studied.
- We sought to evaluate the impact of attendance in a MHC on the treatment choices for management of ED and the effect on QOL.
- We hypothesized that men attending the MHC would have better access to comprehensive care and thus earlier return of sexual function.

METHODS

- A retrospective cohort study of a radical prostatectomy QOL database was conducted of men undergoing radical prostatectomy between April 2010 and Oct 2014.
- Men who did not fill out the sexual domain of the prospectively collected EPIC questionnaire were excluded.
- The primary quality outcomes of interest were ability to function sexually (EPIC question 11; good and very good vs fair, poor, or very poor) and quality of erections (EPIC question 9; adequate for masturbation or intercourse).
- Descriptive statistics were performed with Fisher's exact test and Student's t-test. A Kaplan Meier plot and logrank test were used to evaluate time to erectile function.

RESULTS

- Four hundred and eighteen men were identified for inclusion in the study with mean (SD) age 60.3 (6.8) years and mean (SD) BMI of 28.3 (3.8) *Table 1.*
- Median (IQR) follow-up was 60 (31.5-78.5) months.
- Fifty-two (12.6%) men underwent a non-nerve sparing radical prostatectomy while 362 (87.4%) underwent unilateral or bilateral nerve sparing surgery.
- One hundred fifty nine (38.0%) men attended a MHC.
- The average (SD) number of erectile aids offered to patients attending a MHC was 2.8 (1.1) compared with 2.2 (1.4) for patients who did not attend (p<0.001).
- Patients attending the MHC were more likely to be offered on demand PDE5 inhibitors, VED, and ICI within the first six months (p<0.05) *Figure 1*.
- One hundred seventy four (41.6%) patients achieved erections adequate for masturbation or intercourse at median (IQR) time from prostatectomy of 12 (6-24) months.
- A Kaplan Meier demonstrates comparison of time to adequate erections between patients who attended MHC and not (logrank p=0.003) *Figure 2*.

Variable	MHC N=159 (%)	No MHC N=259 (%)	p-value
Age, mean (SD)	60.2 (7.2)	60.4 (6.6)	0.742
BMI, mean (SD)	28.4 (4.0)	28.2 (3.7)	0.564
Nerve-sparing prostatectomy	143 (89.9%)	223 (86.1%)	0.158
Radiation	21 (13.2%)	40 (15.4%)	0.316
Number of erectile aids offered, mean (SD)	2.8 (1.1)	2.2 (1.4)	<0.001
Use of erectile aid within 6 months:			
Daily tadalafil	147 (92.5%)	154 (59.5%)	<0.001
On demand PDE5 inhibitor	80 (50.3%)	113 (43.6%)	0.190
VED	92 (57.9%)	123 (47.7%)	0.044
ICI	38 (23.9%)	30 (11.6)	0.002
IPP placed	6 (3.8%)	8 (3.1%)	0.782
Adequate erections obtained during study period	83 (52.2%)	91 (35.1%)	0.001
Months to adequate erections, median (IQR)	27 (10-64)	35 (12-69)	0.348

Table 1: Demographic information of included patients and descriptive statistics.

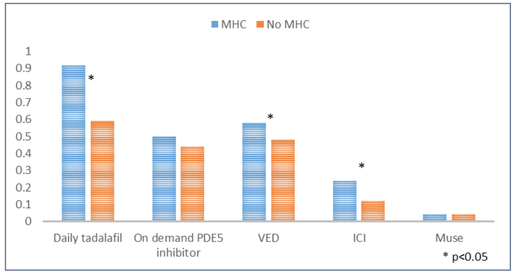

Figure 1: Use of erectile aids (% of patients) at 6 months following Radical Prostatectomy based on attendance at MHC.

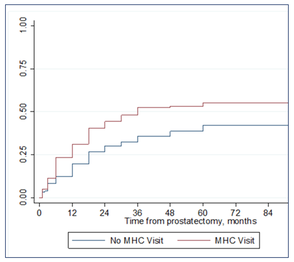

Figure 2: Kaplan Meier comparing time to adequate erections based on MHC attendance.

DISCUSSION

- Post-prostatectomy specific MHC offers more options for managing ED and patients who attend have increased and more rapid return of erectile function.
- A MHC can offer in-depth counselling on ED and QOL related concerns as well as the ability to facilitate progress through these treatments with multidisciplinary support.
- While research on penile rehabilitation (PR) is ongoing, some analyses suggest potential benefit of PDE5i, VED and ICI programs in increasing the number of patients with ED improvement during therapy. Patients should be informed of the potential QOL benefit of PR during the year following prostatectomy.[6,7]
- Adherence to PR therapy has been noted to decline over time.[8] Men receiving better support services are more adherent and report better sexual QOL.[9]
- Efforts to improve sexual function after treatment for prostate cancer have been shown to have the greatest impact on symptom-specific QOL.[1]
- Limitations include the retrospective nature of study. A larger population of included patients could increase the power of the analysis. The study relied on subjective patient report in surveys. Objective testing of erectile function would provide quantitative data on degree of effect.
- This analysis reveals a preliminary benefit of a MHC, future study would be worthwhile.

CONCLUSION

- Men attending a post-prostatectomy MHC are offered more options for management of ED and have improved outcomes. Attendance in a MHC should be advocated for men wishing to pursue erectile function following radical prostatectomy.

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The study protocol was approved by the EVMS Institutional Review Board in compliance with all applicable federal regulations governing the protection of human subjects.