Continence, potency and oncological outcomes after robotic-assisted radical prostatectomy: early trifecta results of a high-volume surgeon


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INTRODUCTION

At present, prostate cancer accounts for nearly 33% of all newly diagnosed cancers in men and, particularly for men with organ-confined disease, several treatment alternatives are now available [1]. However, radical prostatectomy (RP) remains the standard for long-term cure [2], with cancer-specific survival approaching 95% at 15 years after RP. Consequently, the investigation of long-term results has increasingly focused on the other two mainstay outcomes after RP: recovery of continence and erectile function. Widespread PSA screening and the consequent diagnosis of prostate cancer in younger and healthier men with organ-confined disease have further underlined the importance of urinary and sexual function recovery after surgery. However, the individual outcomes of these three parameters are not necessarily independent of each other, i.e. improvement in one outcome may come at the expense of the other two outcomes. Achieving all three, rendering the patient cancer-free while recovering continence and sexual function, has become the hope in those men with organ-confined cancer who are continent and potent before RP.

The concept of reporting the likelihood of achieving these three outcomes (cancer-free, continence and potency) concurrently after RP, the so-called ‘trifecta’, has been gradually widespread. Salomon et al. [3] first reported functional and oncological outcomes combined in their series of open, laparoscopic, and perineal prostatectomy, in 2003. The term ‘trifecta’ was then subsequently adopted to describe concomitant oncological, continence, and potency outcomes in 2004, at

Study Type – Therapy (case series)
Level of Evidence 4

OBJECTIVE

• To evaluate early trifecta outcomes after robotic-assisted radical prostatectomy (RARP) performed by a high-volume surgeon.

PATIENTS AND METHODS

• We evaluated prospectively 1100 consecutive patients who underwent RARP performed by one surgeon. In all, 541 men were considered potent before RARP; of these 404 underwent bilateral full nerve sparing and were included in this analysis.
• Baseline and postoperative urinary and sexual functions were assessed using self-administered validated questionnaires.

RESULTS

• The trifecta rates at 6 weeks, 3, 6, 12, and 18 months after RARP were 42.8%, 65.3%, 80.3%, 86% and 91%, respectively.
• There were no statistically significant differences in the continence and BCR-free rates between the three age groups at all postoperative intervals analysed.

CONCLUSION

• RARP offers excellent short-term trifecta outcomes when performed by an experienced surgeon.
• Younger men had higher overall trifecta rates when compared with older men at 6 months and 12 months after RARP.

KEYWORDS

prostate cancer, prostatectomy, treatment outcome, robotic, prognosis

Although each specific outcome of RP has been extensively described, few series analysing the trifecta rates after RP have been previously reported [3-6]. Moreover, only one series reporting trifecta rates after robotic-assisted RP (RARP) has been published [7]. We report herein trifecta outcomes after RARP performed by one surgeon in a cohort of preoperative potent men. Additionally, potency, continence and oncological outcomes, stratified by age were analysed.

PATIENTS AND METHODS

We evaluated 1100 consecutive patients who underwent RARP at our institution, from January 2008 to September 2009. All procedures were performed by one surgeon. After Institutional Review Board approval, the data were prospectively collected in a customized database and retrospectively analysed.

Baseline urinary and sexual functions were assessed before RP with self-administered validated questionnaires: the Expanded Prostate Cancer Index Composite (EPIC) and the Sexual Health Inventory for Men (SHIM) [8,9]. In the present study, we selected men with preoperative SHIM scores of >21, and who underwent bilateral full nerve sparing. In all, 541 men had a SHIM score of >21 before RARP; of these, 404 underwent bilateral full nerve sparing and were included in the present analysis. All patients were continent before RARP.

SURGICAL TECHNIQUE AND PENILE REHABILITATION

All cases were carried out using a six-port transperitoneal technique, as described by the authors previously [10]. The nerve sparing was performed athermally, with an early retrograde release of the neurovascular bundles before ligation of the prostatic pedicles, as previously reported [11]. Two technical modifications, aiming to improve the early continence rates, were also adopted in all cases: placement of a periurethral suspension stitch and modified posterior reconstruction of the rhabdosphincter [12,13].

Penile rehabilitation was recommended for all patients. Patients were advised to use regularly phosphodiesterase type 5 (PDE5) inhibitors after RARP, at least three times a week, until recovery of sexual function. Rehabilitation using vacuum erection device (VED) was also recommended once a day, starting 6 weeks after RP.

DEFINITION OF POSITIVE SURGICAL MARGINS (PSMs), BIOCHEMICAL RECURRENCE (BCR), CONTINENCE AND POTENCY

RARP specimens were processed according to the recommendations of the American Society of Clinical Pathologists [14]. The apex and bladder-neck cones were amputated and sectioned in the sagittal plane. The remaining specimen was sectioned transversely at intervals of 4 mm. PSMs were defined as the presence of tumour tissue on the inked surface of the specimen. Pathological staging was performed according to the 2002 TNM system [15].

Follow-up comprised of clinical examination and PSA level determination at 6 weeks, 3, 6, 9 and 12 months after RARP and then every 6 months for the following 4 years. BCR was defined as two consecutive PSA levels of >0.2 ng/mL after RARP [16].

Continence rates were assessed with a self-administered questionnaire (EPIC) at 6 weeks, 3, 6, 12 and 18 months after RP. The definition of continence was based on the answer to the questionnaire item selected to reflect the range of incontinence severity: “How many pads or adult diapers per day did you usually use to control leakage during the last 4 weeks?” Continence was defined as the use of “no pads” (score 0).

Potency rates were also evaluated using a self-administered questionnaire (SHIM) at 1, 3, 6, 12 and 18 months after RP. Potency was defined as the ability to achieve and maintain satisfactory erections firm enough for sexual intercourse for more than >50% of times, with or without the use of oral PDE5 inhibitors (SHIM score of ≥4 on questions 2, 3 and 5). Patients in whom intercourse depended on a VED, penile injection or transurethral alprostadil were not considered potent.

The clinicopathological variables of continence, potency, BCR-free and trifecta rates were compared between three age groups (Group 1, ≤55 years; Group 2, 56–65 years; and Group 3, >65 years).

Continuous variables were compared using Student’s t-test or ANOVA, while categorical variables were analysed using either the chi-square or Fisher’s exact test. Additionally, Kaplan–Meier curves were constructed to estimate the time to recovery of continence, potency and BCR. The distribution among age groups was compared using the log-rank test. Statistical significance was defined as P < 0.05.

RESULTS

The patients’ characteristics stratified by age are presented in Table 1.

The mean follow-up was 12 months. The median body mass index (interquartile range, IQR) was 27 (25–30) kg/m² and the median (IQR) preoperative PSA level was 4.4 (3.4–6) ng/mL. These characteristics were similar among the three age groups (Table 1).

As expected, the younger men had a lower median prostate size when compared with the older men (43 vs 48 vs 56 g; P < 0.001).

ONCOLOGICAL OUTCOMES

The overall and stage-specific PSM rates, stratified by age, are shown in Table 2.

Clinical stage, pathological stage, Gleason score of the surgical specimen, overall and stage-specific PSM rates were comparable among the three age groups (P > 0.05 for all variables; Tables 1,2).

Six (1.48%) men had incomplete data for BCR and could not be included in the analysis. The overall BCR-free rates were 98.7%, 97.5%, 96.7% 95% and 91.4% at 6 weeks, 3, 6, 12, and 18 months after RARP, respectively (Table 3). The BCR-free rates of the age-stratified groups are also summarized in Table 3. There was no statistically significant difference between the age groups at all intervals analysed.

There was no statistically significant difference in the mean (95% CI) time to BCR among the three groups in the Kaplan–Meier curves: group 1, 70.59 (68.67–72.52) weeks vs group 2, 70.04 (68.13–71.93) weeks vs
CONTINENCE OUTCOMES

In all, 11 (2.72%) men had incomplete data for continence after RARP and were not included in the analysis. The overall continence rates were 67.7%, 85.4%, 95.7%, 97.4% and 97.9% at 6 weeks, 3, 6, 12, and 18 months after RARP, respectively (Table 3). Continence outcomes of the age-stratified groups are summarized in Table 3. There was no statistically significant difference between the age groups at all time points analysed.

There was no statistically significant difference in the median (mean; 95% CI) time to recovery of continence among the three age groups in the Kaplan–Meier curves: group 1, median: 6 (11.09; 8.481–13.703) weeks vs group 2, 6 (11.79; 9.66–13.925) weeks vs group 3, 6 (13.39; 9.67–17.11) weeks (log-rank, \( P = 0.344 \); Fig. 1B).

POTENCY OUTCOMES

In all, 17 (4.2%) men had incomplete data for potency and were not included in the analysis. The overall potency rates were 53.5%, 68.8%, 91.5%, 97.4% and 96.6% at 6 weeks, 3, 6, 12, and 18 months after RARP, respectively (Table 3). The potency outcomes of the age-stratified groups are summarized in Table 3. Younger men had higher potency rates when compared with older men at 6 weeks, 3, 6 and 12 months after RARP (\( P < 0.01 \) at all time points). There was a trend to higher potency rates for younger men at 18 months after surgery (\( P = 0.07 \)), which did not achieve statistical significance.

The median (mean; 95% CI) time to recovery of potency showed a statistically significant difference in favour of the younger men in the Kaplan–Meier curves: group 1, median 6 (13.7; 10.89–16.50) weeks vs group 2, 6 (16.12; 13.55–18.69) weeks vs group 3, 24 (28.45; 22.20–34.69) weeks (log-rank, \( P < 0.01 \); Fig. 1C).

TRIFECTA OUTCOMES

The overall trifecta rates were 42.8%, 65.3%, 80.3%, 86% and 91% at 6 weeks, 3, 6, 12, and 18 months after RARP, respectively (Table 3). The trifecta rates of the age-stratified groups are summarized in Table 3. Younger men had higher trifecta rates when compared with older men at 6 weeks, 3 and 6 months after RARP (\( P < 0.01 \) at all time points). The trifecta rates were also higher for younger men at 12 months (91.3% vs 85.6% vs 77.7%; \( P = 0.272 \)) and 18 months (96.4% vs 88.3% vs 87.5%; \( P = 0.455 \)) after RARP but this difference was not statistically significant.

The cumulative incidence of trifecta events is shown in Fig. 1D.

DISCUSSION

The three long-term goals of RP are complete removal of the cancer, recovery of urinary continence and recovery of potency [6]; these outcomes are not independent. Therefore,
TABLE 3 Overall and age-stratified continence, potency, BCR-free and trifecta rates

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall, n/N (%)</th>
<th>Age group, years</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>≤55</td>
<td>56–65</td>
</tr>
<tr>
<td>Continence rates at:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 weeks</td>
<td>266/393 (67.7)</td>
<td>100/140 (71.4)</td>
<td>109/164 (66.4)</td>
</tr>
<tr>
<td>3 months</td>
<td>280/328 (85.4)</td>
<td>99/112 (88.4)</td>
<td>120/142 (84.5)</td>
</tr>
<tr>
<td>6 months</td>
<td>267/279 (95.7)</td>
<td>88/90 (97.8)</td>
<td>120/126 (95.2)</td>
</tr>
<tr>
<td>12 months</td>
<td>187/192 (97.4)</td>
<td>60/60 (100)</td>
<td>83/86 (96.2)</td>
</tr>
<tr>
<td>18 months</td>
<td>94/96 (97.9)</td>
<td>29/29 (100)</td>
<td>47/48 (97.9)</td>
</tr>
<tr>
<td>Potency rates at:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 weeks</td>
<td>207/387 (53.5)</td>
<td>97/136 (71.3)</td>
<td>81/163 (49.7)</td>
</tr>
<tr>
<td>3 months</td>
<td>216/314 (68.8)</td>
<td>90/113 (79.7)</td>
<td>91/136 (66.9)</td>
</tr>
<tr>
<td>6 months</td>
<td>210/257 (81.7)</td>
<td>82/93 (88.1)</td>
<td>90/110 (82)</td>
</tr>
<tr>
<td>12 months</td>
<td>162/177 (91.5)</td>
<td>57/60 (95)</td>
<td>74/78 (94.8)</td>
</tr>
<tr>
<td>18 months</td>
<td>84/87 (96.6)</td>
<td>28/28 (100)</td>
<td>42/43 (97.7)</td>
</tr>
<tr>
<td>BCR-free rates at:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 weeks</td>
<td>393/398 (98.7)</td>
<td>138/141 (97.8)</td>
<td>162/166 (97.6)</td>
</tr>
<tr>
<td>3 months</td>
<td>352/361 (97.5)</td>
<td>124/127 (97.6)</td>
<td>148/153 (96.7)</td>
</tr>
<tr>
<td>6 months</td>
<td>299/309 (96.7)</td>
<td>100/103 (97.1)</td>
<td>126/131 (96.1)</td>
</tr>
<tr>
<td>12 months</td>
<td>193/203 (95)</td>
<td>65/68 (95.6)</td>
<td>82/87 (94.2)</td>
</tr>
<tr>
<td>18 months</td>
<td>85/93 (91.4)</td>
<td>28/31 (90.3)</td>
<td>39/43 (90.7)</td>
</tr>
<tr>
<td>Trifecta rates at:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 weeks</td>
<td>165/385 (42.8)</td>
<td>78/135 (57.7)</td>
<td>67/162 (41.3)</td>
</tr>
<tr>
<td>3 months</td>
<td>184/282 (65.3)</td>
<td>77/106 (72.6)</td>
<td>78/121 (64.4)</td>
</tr>
<tr>
<td>6 months</td>
<td>192/239 (80.3)</td>
<td>71/83 (85.5)</td>
<td>79/105 (75.2)</td>
</tr>
<tr>
<td>12 months</td>
<td>148/172 (86)</td>
<td>53/58 (91.3)</td>
<td>67/78 (85.8)</td>
</tr>
<tr>
<td>18 months</td>
<td>79/87 (91)</td>
<td>27/28 (96.4)</td>
<td>38/43 (88.3)</td>
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</tbody>
</table>

assessing individual results after RP may not truly inform the patient regarding what to expect in terms of overall cancer control and quality of life. This has led to the concept of reporting the likelihood of achieving the three outcomes concurrently after RP (‘trifecta’). Few series reporting trifecta outcomes after RP have been published and the results differ widely, probably secondary to the lack of standardized definitions on assessment of continence, potency and BCR [3–7].

Salomon et al. [3] first reported trifecta outcomes in their series of 206 patients who underwent open, laparoscopic, and perineal RP. Continence and potency were evaluated by self-administered questionnaires. Each patient was attributed 0 or 4 points according to the presence or absence of BCR, 0 or 2 points according to the presence or absence of urinary incontinence and 0 or 1 point according to the presence or absence of erectile dysfunction. About 20% of these men had a score of 7 (meaning freedom from BCR, with complete continence and potency) at 1 year after RP. Subsequently, Bianco et al. [5] reported trifecta outcomes in 758 consecutive patients who underwent open RP by one surgeon; of these, 71.8% had bilateral and 27.7% had unilateral nerve-sparing procedures. Urinary and sexual functions were evaluated with patient questionnaires, reviewed by the treating physician. At 24 months, 60% of patients were potent, continent, and free of cancer. Similarly, Pierorazio et al. [4] evaluated trifecta outcomes in 416 patients who underwent open RP performed by one surgeon. Patients were stratified according the D’Amico’s criteria. Urinary continence and erectile function were determined by patient-report at postoperative office visits and by surgeon’s interview. The trifecta rates in this series were 72.6% for low-risk, 58.1% for intermediate-risk, and 40.0% for high-risk patients. Finally, Eastham et al. [6] recently evaluated trifecta outcomes in 1577 patients undergoing open RP for treatment of clinical stage T1c–T3a prostate cancer. Continence and potency were assessed by patient-reported questionnaire or physician interview. In all, 80% of the patients were potent and 19% underwent partial or complete unilateral NVB resection and 1% underwent bilateral no-nerve-sparing procedure. A trifecta outcome was achieved in 62% of patients at 48 months of follow-up.

The first series reporting trifecta outcomes in RARP patients was recently published by Shikanov et al. [7]; 380 preoperatively continent and potent men who underwent bilateral nerve-sparing surgery were analysed. Subjective definitions of postoperative continence and potency were recorded by the attending surgeon while objective definitions were based self-administered questionnaire. The trifecta rates applying subjective continence and potency definitions were 34% at 3 months, 52% at 6 months, 71% at 12 months, and 76% at 24 months. While using the objective continence and potency definitions, trifecta rates dropped to 16% at 3 months, 31% at 6 months, and 44% at 12 and 24 months (Table 4) [3–7].

In the present series, the overall trifecta rates applying objective potency and continence definitions approached 86% at 12 months after RARP. Nevertheless, the present study included a selected cohort of preoperatively potent men who underwent RARP performed by one surgeon with a previous experience of >1500 procedures. Therefore, the outcomes during our ‘learning curve’ were not included in this study. Previous publications have shown that surgical experience and surgical technique can clearly affect BCR, continence and potency after RP [17,18]. Vickers et al. [17] evaluated 7765 patients who were treated with RP by one of 72 surgeons at four major USA academic medical centres. The predicted probabilities of recurrence at 5 years were 17.9% for patients treated by surgeons with 10 prior operations and 10.7% for patients treated by surgeons with 250 prior operations (P < 0.01). The learning curve for BCR after RP did not start to plateau until a surgeon had completed ≥250 prior operations. Therefore, the large surgical experience might have influenced the trifecta outcomes reported in the present series.

Recent studies have suggested that early institution of penile rehabilitation after RP is also associated with better potency outcomes. Mulhall et al. [19] evaluated 84 preoperative potent men who underwent bilateral nerve-sparing RP. The patients were subdivided into those starting rehabilitation (using initially PDE5 and, if unsuccessful, intracavernosal injections) at <6 months after RP and those starting at ≥6 months after RP. At 2 years...
after RP, there was a statistically significant difference in the percentage of men who had unassisted functional erections and PDE5-assisted functional erections in favour of the early rehabilitation (58% vs 30%, P < 0.01; 86% vs 45%, P < 0.01, respectively). Early penile rehabilitation was recommended for all men in the present series, which could therefore have contributed to the good potency rates reported.

Age-stratified outcomes after RP have been previously reported. Rogers et al. [20] evaluated potency and continence rates in 369 patients who underwent laparoscopic RP performed by two surgeons. The patients were stratified into three age groups: group 1, <50 years; group 2, 50–59 years; and group 3, ≥60 years. Functional outcomes were assessed with self-administered questionnaires. Younger men had higher continence (100%, 91% and 81%, respectively, P < 0.01) and potency rates (70%, 67% and 46%, respectively, P < 0.01) at 1 year after laparoscopic RP when compared with older men. Logistic regression modelling showed that being younger was the only factor associated with return of urinary continence at all postoperative time points. Being younger was also associated with early return of potency at 3 and 6 months after RP. Likewise, Mendiola et al. [21] evaluated age-stratified functional outcomes in 338 consecutive patients who underwent RARP performed by two surgeons. Outcomes were assessed subjectively by patient interview, as well as using validated questionnaires.

Kaplan–Meier curve analysis showed that younger men achieved subjective continence significantly earlier than older men. However, the continence rates were similar among all age groups at the 1-year follow-up. Younger men also had earlier return of sexual function and higher overall potency rates at 1 year after RARP. Similarly, in the present study younger men had a shorter time to recovery of sexual function and higher potency rates when compared with older men at 6 weeks, 3, 6 and 12 months after RARP. Additionally, higher trifecta rates were reported in the younger age group at 6 weeks, 3 and 6 months after RARP. Although the trifecta rates were higher in the younger men at 12 and 18 months after RARP, there was no statistically significant difference; nevertheless, the statistical analysis was underpowered due to the small sample size evaluated at these time points. In contrast to previous studies, the continence rates were similar among the three age groups at all intervals evaluated in the present study and there was no statistically significant difference in the median/mean time to recovery of continence. We think that the highly experienced surgeon and some technical modifications (i.e. perirethral suspension stitch, modified reconstruction of the rhabdosphincter) [12,15] routinely adopted during our RARP procedure helps to explain the comparable early continence rates between the three age groups.

The present study has some limitations. The outcomes are based on one surgeon, who has performed >3500 RARPs. Therefore, these results may not be applicable to less experienced surgeons or to low-volume surgical centres. In addition, the mean follow-up was relatively short (12 months); consequently, the sample size analysed at 12 and 18 months follow-up was relatively small. Furthermore, we analysed a selected population of patients with preoperative SHIM scores of >21 who underwent bilateral nerve-sparing RARP. As strengths, the present study used validated self-administered questionnaires to evaluate continence and potency rates serially after RARP. Most of the published studies reporting trifecta rates after RP used questionnaires reviewed with physicians or patient-physician interviews, which is usually poorly correlated with patient self-assessments of health-related quality of life [22]. Additionally, postoperative data (questionnaires) for potency, continence and BCR-free recurrence were available for >95% of the patients included in the present study.

In conclusion, RARP offers excellent short-term trifecta outcomes when performed by an
### TABLE 4 Trifecta outcomes after RP

<table>
<thead>
<tr>
<th>Reference</th>
<th>N*</th>
<th>Approach</th>
<th>Nerve-sparing (%)</th>
<th>Definition of BCR, continence and potency</th>
<th>% Cancer-free</th>
<th>Continence</th>
<th>Potency</th>
<th>Trifecta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salomon et al. [4]</td>
<td>205</td>
<td>Open, laparoscopic and perineal RP</td>
<td>N/A</td>
<td>PSA &gt;0.2 mg/dL 0 pads Erection sufficient for intercourse</td>
<td>85 at 1 year</td>
<td>66 at 1 year</td>
<td>33 at 1 year</td>
<td>20 at 1 year</td>
</tr>
<tr>
<td>Bianco et al. [5]</td>
<td>758</td>
<td>Open RP</td>
<td>BNS (72) UNS (28)</td>
<td>PSA &gt;0.4 mg/dL (1983–96) PSA &gt;0.2 mg/dL 0–1 security pad Erection sufficient for intercourse</td>
<td>83 at 6 years</td>
<td>91 at 1.5 years</td>
<td>63 at 1 year</td>
<td>60 at 2 years</td>
</tr>
<tr>
<td>Pierorazio et al. [3]</td>
<td>416</td>
<td>Open RP</td>
<td>BNS (83) UNS (13) NNS (4)</td>
<td>PSA &gt;0.2 mg/dL 0–1 security pad Erection sufficient for intercourse</td>
<td>91 at 5 years</td>
<td>79 at 1 year</td>
<td>39 at 1 year</td>
<td>62 at 2 years</td>
</tr>
<tr>
<td>Eastham et al. [6]</td>
<td>1577</td>
<td>Open RP</td>
<td>BNS (80) UNS (19) NNS (1)</td>
<td>PSA &gt;0.2 mg/dL 0 pads Erection sufficient for intercourse</td>
<td>99 at 3 months</td>
<td>57 at 3 months</td>
<td>63 at 3 months</td>
<td>57 at 3 months</td>
</tr>
<tr>
<td>Shikanov et al. [7]</td>
<td>380</td>
<td>RARP</td>
<td>BNS (100)</td>
<td>**Subjective definitions: Continence, included total urinary control or occasional use of security pad Potency, intercourse with or without PDE5 inhibitors</td>
<td>99 at 3 months</td>
<td>57 at 3 months</td>
<td>63 at 3 months</td>
<td>57 at 3 months</td>
</tr>
<tr>
<td>Present series</td>
<td>404</td>
<td>RARP</td>
<td>BNS (100)</td>
<td>PSA &gt;0.2 mg/dL self-administered questionnaires Continence, use of no pads Potency, the ability to achieve and maintain erections firm enough for sexual intercourse &gt;50% of times with or without the use of oral PDE5 inhibitors</td>
<td>98.2 at 6 weeks</td>
<td>67.7 at 6 weeks</td>
<td>53.5 at 6 weeks</td>
<td>42.8 at 6 weeks</td>
</tr>
</tbody>
</table>

*Trifecta outcomes available; **Increasing PSA on 2 consecutive tests; N/A, not applicable; BNS, bilateral nerve-sparing; UNS, unilateral nerve-sparing; NNS, no nerve-sparing; UCLA-PCI, University of California, Los Angeles-Prostate Cancer Index; LR, low risk; IR, intermediate risk; HR, high risk.
experienced surgeon. Younger men had higher overall trifecta rates when compared with older men at 6 weeks, 3 months and 6 months after RARP. These findings can be attributed to the earlier return of sexual function and higher overall potency rates reported by younger men after RARP, as the continence and BCR-free rates were similar between the age groups studied.

CONFLICT OF INTEREST

None declared.

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Abbreviations: (RA)RP, (robotic-assisted) radical prostatectomy; EPIC, Expanded Prostate Cancer Index Composite; SHIM, Sexual Health Inventory for Men; PDE5, phosphodiesterase type 5; VED, vacuum erection device; PSM, positive surgical margin; IQR, interquartile range.