New Evolution of Robotic Radical Prostatectomy: A Single Center Experience with PERUSIA Technique

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Abstract: Radical prostatectomy (RP) is the standard surgical treatment of organ-confined prostate cancer in patients with a life expectancy of at least 10 years. In a recent prospective study, we described the PERUSIA (Posterior, Extraperitoneal, Robotic, Under Santorini, Intrafascial, Anterograde) technique, which is an extraperitoneal full nerve sparing robotic RP, showing its feasibility and safety. The aim of this retrospective study was to evaluate the peri-operative, oncologic, and functional outcomes of the PERUSIA technique. We retrospectively analyzed the data of 454 robotic-assisted radical prostatectomies (RARP) performed using the PERUSIA technique from January 2012 to October 2019. We evaluated perioperative outcomes (operative time, estimated blood loss, catheterization time, complication rate, length of stay), oncological (positive surgical margins and biochemical recurrence), and functional outcomes in terms of urinary continence and sexual potency. The overall complication rate was 16%, positive surgical margins were 8.1%, and biochemical recurrence occurred in 8.6% at median follow-up of 47 months. Urinary continence was achieved in 69% of cases the day after the removal of the catheter, in 92% at 3 months, and in 97% at 12 months after surgery. The average rate of sexual potency was 72% and 82% respectively 3 and 12 months after surgery. Our findings show that the PERUSIA technique is a safe extraperitoneal approach to perform a full nerve sparing technique providing exciting functional outcomes.

Keywords: radical prostatectomy; PERUSIA; nerve-sparing; functional outcomes; oncological outcomes; RARP; oncology

1. Introduction

Prostate cancer (PCa) is the second most common malignant neoplasm in the male population. In 2019, the prevalence in the USA was over 3,650,000 cases, while the new diagnoses were 174,950 [1]. However, even more interesting is the estimated prevalence for 2030 of over 5 million cases, which is emblematic of cancer being in continuous evolution [2].

Radical prostatectomy (RP) is the standard surgical treatment of organ-confined PCa in patients with a life expectancy of at least 10 years [2]. The main objectives of this intervention are first, the eradication of the neoplasm and, secondly, the preservation of urinary continence and sexual potency, trying to minimize the rate of peri- and post-operative complications and to guarantee an optimal quality of life. RP can be performed with an open, laparoscopic, or robotic-assisted approach. Thanks to continuous technological progress, over the last few decades, there has been a continuous evolution of surgical techniques that have led to an ever-greater application of laparoscopy first and then of robotics.

When Abbou, Guillonneau, and Vallancien standardized laparoscopic RP, described for the first time in 1992 by Schuessler, the advantages of the minimally invasive technique over the traditional one became evident, especially in terms of reduction of intra- and post-operative bleeding, post-operative pain, and length of stay [3–5]. Since then, the
The laparoscopic approach began to be used more and more frequently, so much so that it became the reference technique in high-volume centers. However, laparoscopy was immediately characterized by a long learning curve, and this limited its further spread.

In 2001, Binder described the first series of robotic-assisted radical prostatectomies (RARP), highlighting their advantages over the laparoscopic approach [6].

Indeed, the robotic-assisted approach allows maintaining the benefits of laparoscopy, providing additional advantages: the magnification of the operating field thanks to the three-dimensional vision, greater accuracy in dissection and suturing thanks to the EndoWrist® technology (Intuitive Surgical Inc., Sunnyvale, CA, USA), which provides seven degrees of freedom of movement to the instruments, control of the camera by the surgeon from the console, and the almost complete elimination of tremor. The main disadvantages are the absence of tactile feedback and the high costs. However, the robotic approach allows you to reproduce the same steps as “open” surgery, but with the benefits of minimally invasive surgery, overcoming the limits of laparoscopy: simplifying the learning curve and reducing the surgeon’s physical discomfort [7]. All this has led to an increasingly widespread diffusion of robotic surgery, which finds its main indication in RP.

Urinary incontinence and erectile dysfunction are the main adverse effects of RP and are reported up to 31% and 38% at 12 months, respectively [8,9]. To improve functional outcomes in the literature, many different nerve-sparing techniques have been described, but the best one is not yet established. In a recent prospective study, we described the PERUSIA technique, an extraperitoneal full nerve-sparing robotic RP, showing its feasibility and safety [10]. In order to reduce injury of the neuro-vascular bundle (NVB), PERUSIA-RP starts with a posterior and median plane; this allows preserving as much as possible neurovascular structures lying outside of the Veil of Aphrodite, which becomes a main anatomic landmark. The aim of this retrospective study was to validate the PERUSIA technique as a safe and effective surgical procedure for RP evaluating the peri-operative, oncologic, and functional outcomes.

2. Materials and Methods

After an extensive experience in “open” and laparoscopic RP, 1010 extraperitoneal RARP were performed from April 2011 to April 2020 in our high-volume center. During this experience in robotic surgery, we developed an innovative technique called PERUSIA (Posterior, Extraperitoneal, Robotic, Under Santorini, Intrafascial, Anterograde), which is aimed at preserving not only the neurovascular bundles but also the entire Veil of Aphrodite and the anterior periprostatic structures, including the venous plexus of Santorini, exploiting extraperitoneal access, with a posterior anterograde intrafascial dissection.

We retrospectively collected data of 800 RARP performed using the PERUSIA technique from January 2012 to October 2019. We included in this study all clinical low-risk PCa in accordance with the categories of prognostic risk of the European Association of Urology Guidelines with life expectancy ≥ 10 years, who were fully continent and sexually potent with 5-item International Index of Erectile Function (IIEF-5) score ≥17 and did not accept active surveillance. Exclusion criteria were life expectancy <10 years, the first 50 cases of PERUSIA technique, which was considered as learning curve series, positive biopsy in anterior prostatic zone, pre-operative urinary incontinence, patients with neuro-urolological lower urinary tract symptoms, erectile disfunction (IIEF-5 < 17), and monolateral nervesparing. All patients were assessed through memorial Sloan–Kettering PCa nomograms to evaluate lymph node involvement risk and to predict the post-operative probability of cancer remaining progression-free [11]. An internal review board approved the study, and written consent was obtained from patients.

We evaluated peri-operative outcomes (operative time, estimated blood loss, catheterization time, complication rate, length of stay) as well as oncological and functional outcomes. Surgical complications were evaluated according to the Clavien–Dindo Classification system.
Oncologic outcomes were evaluated in terms of Positive Surgical Margins (PSMs) and Biochemical Recurrence (BCR) (defined as prostate-specific antigen (PSA) > 0.2 ng/mL in two consecutive evaluations) at a median follow-up of 47 mo (interquartile range (IQR) 24–66 mo). Urinary continence was evaluated through direct interview according to question number 5 of the Expanded Prostate Cancer Index Composite (EPIC) questionnaire [12]. We evaluated urinary continence at 1 day after catheter removal (immediate), at 3 (early), and 12 months after surgery; patients using no pad were considered as fully continent, patients using 1 pad were considered as slightly incontinent, while patients using >1 pad were accounted as incontinent.

Sexual potency was evaluated using the 5-item International Index of Erectile Function test pre-operatively and at 3, 6 and 12 mo after surgery. Specifically, patients were defined as potent when IIEF-5 score was >17 with or without drug. Follow-up consisted of medical examination, PSA measurement, administration of IIEF-5 questionnaires, and self-reported urinary incontinence. Data were analyzed with GraphPad Prism6.0; the significance threshold was set at 0.05.

3. Main Steps of PERUSIA Technique

Through a median sub-umbilical incision of about 1.5 cm, the extraperitoneal space is digitally developed. Two robotic trocars are positioned along the right and left pararectal line, about 7 cm laterally to the median incision where the optic trocar is positioned. Then, under laparoscopic guidance, the development of the extraperitoneal space is completed, and a robotic trocar is positioned 2 cm above and medial to the left upper anterior iliac spine; a contralateral trocar is also positioned for the assistant at the operating table. PneumoRetzius is induced, and the patient is positioned at 15° Trendelenburg. After docking, the PERUSIA technique develops as follows:

- A “U” bladder neck incision with the “Bladder neck sparing” technique;
- Approach perpendicular to the medial side of the seminal vesicles which are mobilized from their lodge always from the medial to the lateral side in order to minimize the manipulation of the neurovascular bundles;
- After incising the Denonvillier’s fascia, an infravesical antegrade dissection is performed, always proceeding from the medial to the lateral aspect; in this way, the preservation of the bundles is maximized, which in fact remain outside the dissection plane;
- Preservation of the anterior periprostatic tissue and “no-touch” approach of the dorsal vascular complex, developing an anterior avascular plane; this allows us to: Reduce urethral retraction and maximize the functional length of the urethra, which are factors that are essential for the early recovery of urinary continence; Reduce bleeding; Preserve the anterior periprostatic nervous and vascular structures, which seem to have a role in the conservation of sexual potency and urinary continence; Preserve that part of the urethral sphincter that is lined anterolaterally by the dorsal vascular complex;  
- Urethrovesical anastomosis with bidirectional self-locking suture (Quill®).

4. Results

Overall, 346 patients were excluded, whereas 454 matched the inclusion criteria, and their data were retrospectively analyzed. The mean operative time was 105 min (range 47–290) with mean console time of 76 min (range 36–120 min) and mean bleeding of 140 mL (50–450) with an average transfusion rate of 2.7% (Table 1). The average time to restore intestinal activity was 15 h, the catheterization time was 6.5 days (range 4–18 days), and the hospital stay was 6.8 days (range 1–12 days). The overall complication rate was 16%, of which 2.7% were grade III; there were no grade IV or V complications. The overall PSM rate was 8.1% (37/454), of which 51.4% (19/37) were focal, which is defined as PSM length ≤ 1 mm. The site of PSM was the apex in 37.8% (14/37) of cases, the posterolateral region in 35.2% (13/37), the bladder neck in 2.7% (1/37), the anterior zone in 2.7% (1/37), whereas in 21.6% (8/37), they were multifocal. Upstaging to pT3 and upgrading occurred
in 15 (3.3%) and 73 (16.1%) patients, respectively. BCR occurred in 39 out 454 (8.6%) patients, of which 21 (53.8%) showed PSM. At median follow-up of 47 mo, no patient developed metastasis.

Table 1. Summary of the perioperative results, the rate of positive surgical margins, the rate of Biochemical Recurrence (BCR) and complications; those relating to urinary continence are in Figure 1, and those relating to sexual potency are in Figure 2.

| Values (Range) |
|---------------|
| Time in console | 76 min (36–120) |
| Time of preparation the Retzius | 22 min (11–33) |
| Estimated blood loss | 128 mL (50–1000) |
| Conversions | 0% |
| Positive surgical margins | 8.1% |
| Biochemical recurrence | 8.6% |
| Complications | 16% |
| Grade I | 8% |
| Grade II | 5.3% |
| Grade III | 2.7% |
| Grade IV–V | 0% |

From a functional point of view, urinary continence was achieved in 69% of cases the day after the removal of the catheter, in 92% at 3 months, and in 97% at 12 months after surgery (Figure 1). The average rate of sexual potency was 72% and 82% respectively 3 and 12 months after surgery (Figure 2).

Figure 1. Continence rate after Perusia RARP.
The prevalence of urinary incontinence 12 months after laparotomic radical prostatectomy is 40% [22]. Urinary incontinence and erectile dysfunction are the main complications related to the three different approaches, the authors found no statistically significant differences, except for a lower need for transfusions in patients undergoing robotic radical prostatectomy [13,14]. Patients who underwent “open” radical prostatectomy in high-volume centers in Europe and the USA have, 15 years after surgery, a biochemical recovery-free survival of up to 75% and cancer-specific mortality ranging from 7% to 20% [15,16]. The data present in the literature on the oncological results of robot-assisted radical prostatectomy are evaluated and reported in a not very homogeneous way and are still limited in time; therefore, evaluating the oncological efficacy of the robotic approach in terms of positive surgical margins, which is needed for every technique to be safe, showing an average value of 15% (range 6.5%–32%). By stratifying these data concerning the extent of the disease, the positive surgical margins were 9% in pT2, 37% in pT3, and 50% in pT4. PSMs are more frequent at the prostatic apex followed by a posterolateral site and represent a negative prognostic factor for PCa [17]. Gleason grade, PSMs length, and multifocality were all associated with worse BCR-free survival [18]. Survival in the absence of biochemical progression was 90% at 3 years after surgery, 87% at 5 years, and 81% at 7 years. In a randomized phase III study, the robotic approach, while making it possible to reduce blood losses and new post-surgery hospitalizations, did not improve the oncological results, even if evaluated at 3 months [19–21]. Furthermore, even in a recent systematic review of the literature, it is highlighted that comparing the oncological outcomes of the robotic approach with the “open” and laparoscopic ones, there are no statistically significant differences either in terms of positive surgical margins or biochemical recurrence [22]. Urinary incontinence and erectile dysfunction are the main complications of radical prostatectomy. The prevalence of urinary incontinence 12 months after laparotomic radical prostatectomy is between 7% and 40%, depending on whether a patient is considered continent who does not need protection at all or a patient who needs one safety pad at most. Similar are the

![Figure 2. Potency rate after Perusia RARP.](image-url)

5. Discussion

5.1. Why Robotics in Radical Prostatectomy?

In a recent systematic review of the literature, Novara et al. highlighted the safety of radical prostatectomy with the robotic technique, in terms of peri-operative outcomes: the mean operative time was about 152 min (range 90–291 min), the mean blood loss was estimated at about 166 mL (range 69–534 mL), the average length of stay was 1.9 days (range 1–6 days), and the average catheterization time was approximately 6.5 days (range 5–8.6 days). The overall rate of postoperative complications was 9% (range 3–26%) and, subdividing them according to the classification of Clavien–Dindo, they were 4% of I degree, 3% of II degree, 2% of III degree, 0.4% of IV degree, and 0.002% of V degree. The most frequently reported complications were lymphocele (3.1%), urine leakage (1.8%), and the need for reoperation (1.6%). Comparing the peri-operative outcomes and complications related to the three different approaches, the authors found no statistically significant differences, except for a lower need for transfusions in patients undergoing robotic radical prostatectomy [13,14]. Patients who underwent “open” radical prostatectomy in high-volume centers in Europe and the USA have, 15 years after surgery, a biochemical recovery-free survival of up to 75% and cancer-specific mortality ranging from 7% to 20% [15,16]. The data present in the literature on the oncological results of robot-assisted radical prostatectomy are evaluated and reported in a not very homogeneous way and are still limited in time; therefore, evaluating the oncological efficacy of the robotic approach in terms of positive surgical margins, which is needed for every technique to be safe, showing an average value of 15% (range 6.5%–32%). By stratifying these data concerning the extent of the disease, the positive surgical margins were 9% in pT2, 37% in pT3, and 50% in pT4. PSMs are more frequent at the prostatic apex followed by a posterolateral site and represent a negative prognostic factor for PCa [17]. Gleason grade, PSMs length, and multifocality were all associated with worse BCR-free survival [18]. Survival in the absence of biochemical progression was 90% at 3 years after surgery, 87% at 5 years, and 81% at 7 years. In a randomized phase III study, the robotic approach, while making it possible to reduce blood losses and new post-surgery hospitalizations, did not improve the oncological results, even if evaluated at 3 months [19–21]. Furthermore, even in a recent systematic review of the literature, it is highlighted that comparing the oncological outcomes of the robotic approach with the “open” and laparoscopic ones, there are no statistically significant differences either in terms of positive surgical margins or biochemical recurrence [22]. Urinary incontinence and erectile dysfunction are the main complications of radical prostatectomy. The prevalence of urinary incontinence 12 months after laparotomic radical prostatectomy is between 7% and 40%, depending on whether a patient is considered continent who does not need protection at all or a patient who needs one safety pad at most. Similar are the
data on urinary incontinence 12 months after laparoscopic radical prostatectomy with a range from 5% to 34%, and the cumulative analysis of comparative studies between the two approaches, which were performed in a systematic review of the literature, confirmed that the functional results in terms of urinary continence are comparable [23].

In a recent systematic review of the literature, Ficarra et al. reported an average prevalence of urinary incontinence at 12 and 24 months after robotic radical prostatectomy of 16% (range 4–31%) and 12%, respectively, when only patients who did not use pads were considered to be incontinent; if patients who needed a maximum of one safety pad were also included, the average rate was 9% (range 8–11%) at 12 months and 5% at 36 months after surgery. The cumulative analysis of the comparative studies between the robotic technique and the “open” and laparoscopic technique revealed a better result at 12 months of both robotic surgery than the “open” (7.5% vs. 11.3%) with a reduction in absolute risk of 3.8%, both compared to laparoscopic (5% vs. 9.6%) with an absolute risk reduction of 4.6% [24]. In another systematic review, which included two randomized controlled trials comparing the results of robotic radical prostatectomy with those of laparoscopic, the authors found an improved recovery of urinary continence in patients treated with robotic technique (RR: 1.14; 95% CI: 1.04–1.24). However, the results may have been affected by the small size of the study populations [25]. It should also be emphasized that the reported results may be affected by the preoperative clinical characteristics of the patients, the surgeon’s experience, the surgical technique, and the methods used to collect and report data. In fact, as with the laparotomic and laparoscopic approach, age, comorbidities, obesity, and the presence of lower urinary tract symptoms are also factors associated with a worse functional result in terms of urinary continence for the robotic approach [8]. On the other hand, in a randomized phase III study, in which the functional results of the three approaches were compared with a follow up of 24 months, Coughlin et al. found no significant difference between the three different techniques [19]. The prevalence of erectile deficit at 12 months after radical retropubic prostatectomy with nerve-sparing technique varies from 14% to 69%, after laparoscopic radical prostatectomy from 24% to 58% and after robotic radical prostatectomy from 20 to 30% [23,26]. In one of the first comparative studies between open radical and robotic prostatectomy, Tewari et al. showed a faster recovery of sexual potency in patients undergoing robotic surgery (180 days vs. 440 days) [27]. An advantage in terms of recovery of sexual potency was highlighted in a systematic review of the literature, which included studies with case series exceeding 100 cases of robotic radical prostatectomy: the average rate of sexual potency at 3, 6, 12, and 24 months was 50%, 65%, 70%, and 79%, respectively, and independent predictors were age, preoperative IIEF-5, Charlson Comorbidity Index, bilateral nerve-sparing performance, and athermic dissection. The cumulative analysis of six studies comparing sexual potency at 12 months between the open and the robotic approach showed that the latter allowed a reduction in the absolute risk of impotence by 23.6%, with a prevalence of erectile deficit respectively by 47.8% and 24.2% [28]. This result was confirmed by Kim et al. in a prospective comparative evaluation at 24 months of follow up: the erectile deficit rate was 53% after open surgery and 16% after robotic surgery (OR: 6.01; 95% CI, 4.25–8.49; \( p < 0.001 \)) [29]. Then, the same authors performed the cumulative analysis of four studies, one of which is randomized controlled, and three retrospective, which compared the prevalence of impotence after laparoscopic and robotic radical prostatectomy. The study showed a better result for the latter, although it was not statistically significant (OR: 1.89; 95% CI, 0.70–5.05; \( p = 0.21 \)) [29]. However, the only prospective randomized study showed a significant advantage provided by the robotic technique with a prevalence of sexual potency at 12 months of 77% compared to 32% for laparoscopy [30]. A recent systematic review of the literature, which included two prospective randomized studies involving a total of 446 patients, compared peri-operative, oncological, and functional outcomes between minimally invasive radical prostatectomy (laparoscopic or robotic) and “open”. Given the moderate quality of evidence, the authors found no significant difference between the two groups in terms of peri-operative, oncological, functional, and complication outcomes,
except for an advantage of minimally invasive surgery in terms of length of hospital stay and transfusion rate [31].

One of the major reasons for the application of robotic surgery to radical prostatectomy was to reduce the invasiveness of the surgery while increasing its accuracy. This is also in order to reduce iatrogenic morbidity, whose incidence is not negligible in the open approach, and to improve the peri- and post-operative course [32]. However, the quality of the evidence supporting this hypothesis is poor in most cases. In a recent single-center randomized phase III study, Yaxley JW et al. evaluated the postoperative quality of life in 157 patients who underwent robotic radical prostatectomy compared to 150 treated open and concluded that the first group showed significant advantages in terms of pain during normal physical activities only in the immediate post-operative period (24 h and 7 days after surgery); this resulted in an improvement in the quality of life up to 6 weeks after surgery, but not in an earlier return to work [33].

One of the main goals of RARP is to guarantee good functional outcomes and consequently preserve the NVB, according to oncological patient risk. The objective during the nerve-sparing procedure, is to reduce thermal distress and traction on the NVB. Different surgical techniques and approaches have been proposed until today by several authors, but none has been defined as superior to another [34].

5.2. PERUSIA Technique

The extraperitoneal approach is less used than the much more common transperitoneal approach, although it allows achieving the same results and provides additional benefits in selected cases. The ideal indications for an extraperitoneal radical prostatectomy are represented by all those conditions that would complicate a transperitoneal radical prostatectomy such as the results of a previous abdominal surgery and obesity [35]. The equivalence of effectiveness between the two approaches has now been demonstrated [36]. The extraperitoneal route, on the other hand, allows reducing operating times and in particular the console time, in which the patient is positioned in Trendelenburg, as well as the complications rate, especially those of low grade [37]. The extraperitoneal route also exploits the peritoneum, which is not violated, as a natural retractor of the intestinal loops and perivisceral adipose tissue, which are therefore kept away from the operating field. This allows the operation to be carried out with a less accentuated ‘Trendelenburg position (about 15° compared to 25–35° of the transperitoneal route), thus reducing the risk of cardiopulmonary complications, thromboembolic and positional injuries. The preservation of the integrity of the peritoneal cavity also guarantees limiting any blood and/or urine leakage in the extraperitoneal space to minimize the risk of lesions of the intestinal loops. It also ensures an earlier recovery of intestinal activity, a more rapid return to diet and, consequently, a shorter length of stay. The main limitation of this approach is represented by the difficulty in performing an extensive lymphadenectomy. Overall, in our experience, PERUSIA is a safe technique, guaranteeing low peri-operative morbidity, with an overall complications rate of 16%, of which only 2.7% were grade III and none were grade IV and V. No conversion to laparoscopic or traditional surgery was necessary. The overall rate of PSMs was 8.1%, and it is in line with those reported by other authors [22]. However, we would emphasize that 19 out 37 (51.4%) PSMs were focal, and this high rate of focal PSMs in low-risk disease should reduce the prognostic impact of our overall PSMs. Although PSMs have been proved to be associated with BCR, at longer follow-up, this risk should not differ between patients with negative surgical margin and those with PSMs <1 mm [38].

In our series, at median follow up of 47 mo, BCR occurred in 39 out 454 (8.6%) patients. In addition, this finding is in accordance with other experiences. Recently, Eminaga et al. reported, at median follow up of 60 mo, BCR of 8.2% in a cohort including only low-risk PCa patients who underwent RP with pT2N0R0 [39]. With regard to urinary continence understood as the absence of pads, this outcome, evaluated 24 h after the removal of the catheter, was equal to 58%, while it rose to 85%, 92%, and 96% respectively at 3, 6, and 12 months from intervention. This exciting result may be due to our full nerve-sparing tech-
nique with complete preservation of the Veil of Aphrodite that allows reducing the damage of intrapelvic nerves supplying the rhabdosphincter. Recent meta-analysis reported that the degree of preservation of NVB is associated with urinary continence in the first post-operative 6 mo [40]. Steineck and co-workers demonstrated the same association also in the long term [41]. Furthermore, a conservative management of the dorsal venous complex has a positive effect on the continence recovery. Recently, Ganzer et al. demonstrated that the dorsal vascular complex overlaps 37% and 30% of the cross-sectional urethral sphincter surface at the prostatic apex and 5 mm distal to the apex, respectively [42]. Our immediate and early continence rate are also due to a “no-touch” approach of the Santorini Plexus. The recovery of sexual potency was also very satisfactory: evaluating this outcome only in potent patients before surgery (IIEF-5 > 17), the recovery of sexual function occurred in 48% of patients at 3 months, in 72% at 6 months, and in 86% at 12 months and of the latter, 47% required medical therapy (5-phosphodiesterase inhibitors). We would like to point out the shorter time to potency recovery in the PERUSIA technique. This finding is likely due to one key feature of our procedure: the degree of preservation of neurovascular bundles that allows sparing completely the Veil of Aphrodite, the posterolateral as well as anterior nervous and vascular structures. A recent study demonstrated that cavernous nerve fibers running to the corpora cavernosa were a continuation of the nervous fibers running on the anterior and lateral side of the prostate [43]. Furthermore, the lower employment of thermal energy and the low grade of neuroapraxya affect positively on the recovery of erectile function.

6. Conclusions

Currently, there are not enough data in the international literature to establish which approach among the “open”, laparoscopic or robotic, can be considered the gold standard for radical prostatectomy. However, our findings showed PERUSIA-RP to be a safe and effective treatment for low-risk localized PCa with exciting functional outcomes. The main advantage of this technique is the quick recovery of urinary continence and sexual potency thanks to the respect of anatomical details allowing reducing injury of the peri-prostatic NVB, to preserve peri-urethral anterior support and minimize urethral retraction.

Author Contributions: E.M. was responsible for conception and design. D.S. and V.C. acquired the clinical data. S.C. and G.F. independently performed online bibliographic searches in order to identify titles of interest and G.C. select full-text to be included. G.C., M.D.Z. and A.P. took part in either drafting the article and revising it critically for important intellectual content. All authors have read and agreed to the published version of the manuscript, agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Data Availability Statement: Data are available on request due to privacy restrictions.

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