



# Salvage Retzius sparing robotic assisted radical prostatectomy: the first brazilian experience

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## ABSTRACT

**Introduction:** Salvage Radical Prostatectomy after radiation therapy is challenging and associated with high rates of serious complications (1, 2). The novel Retzius-Sparing RARP (RS-RARP) approach has shown excellent continence outcomes (3, 4).

**Purpose:** To describe step-by-step our Salvage Retzius-Sparing RARP (sRS-RARP) operative technique and report feasibility, safety and the preliminary oncological and continence outcomes in the post-radiation scenario.

**Materials and Methods:** Twelve males presenting local prostate cancer recurrence after radiotherapy that underwent sRS-RARP were included. All patients performed preoperative multiparametric MRI and PSMA-PET. Surgical technique: 7cm peritoneum opening at Douglas pouch, Recto-prostatic space development, Seminal vesicles and vas deferens isolation and section, Extra-fascial dissection through peri-prostatic fat, Neurovascular bundle control, Bladder neck total preservation and opening, Anterior dissection at Santorini plexus plane, Apex dissection with urethra preservation and section, Prostate release, Vesicourethral modified Van Velthoven anastomosis, Rocco Stitch, Oncological and continence outcomes reported with minimum 1-year follow-up.

**Results:** Ten patients had previously received external beam radiation (EBR) whereas two received previous brachytherapy plus EBR. At 1, 3 and 12 months after surgery, 25%, 75% and 91.6% of the men used one safety pad or less, respectively. No major complications or blood transfusions were reported. Final pathology reported pT2b 41.6%, pT2c 33.3% and pT3a 25%, positive surgical margins 25%, positive lymph nodes were not found, biochemical recurrence 16.6%.

**Conclusion:** Salvage Retzius-Sparing Robotic Assisted Radical Prostatectomy approach appears to be technically feasible and oncologically safe with potential to provide better continence outcomes.

## CONFLICT OF INTEREST

None declared.

## REFERENCES

1. Nunes-Silva I, Barret E, Srougi V, Baghdadi M, Capogrosso P, Garcia-Barreras S, et al. Effect of Prior Focal Therapy on Perioperative, Oncologic and Functional Outcomes of Salvage Robotic Assisted Radical Prostatectomy. *J Urol.* 2017; 198:1069-76.
2. Chade DC, Eastham J, Graefen M, Hu JC, Karnes RJ, Klotz L, et al. Cancer control and functional outcomes of salvage radical prostatectomy for radiation-recurrent prostate cancer: a systematic review of the literature. *Eur Urol.* 2012; 61:961-71.
3. Galfano A, Secco S, Bocciardi AM. Will Retzius-sparing Prostatectomy Be the Future of Prostate Cancer Surgery? *Eur Urol.* 2017; 72:686-8.
4. Rosenberg JE, Jung JH, Edgerton Z, Lee H, Lee S, Bakker CJ, et al. Retzius-sparing versus standard robotic-assisted laparoscopic prostatectomy for the treatment of clinically localized prostate cancer. *Cochrane Database Syst Rev.* 2020; 8:CD013641.

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