

ONCOLOGICAL AND FUNCTIONAL OUTCOMES OF ROBOTIC, EXTRAPERITONEAL, INTRAFASCIAL RADICAL PROSTATECTOMY TECHNIQUE WITH 360° PRESERVATION OF THE VEIL OF APHRODITE

Aim of the study: To report the oncological, functional, and peri-operative outcomes of a technique of Extraperitoneal, Robot-assisted Radical Prostatectomy (ERARP), with complete preservation of the Veil of Aphrodite, in patients (pt.) with low risk, organ-confined prostate-cancer.

Materials e methods: We performed 210 ERARP between January 2012 and January 2014. We made a prospective analysis of 80 pt. who underwent to intrafascial technique, with complete preservation of the Veil of Aphrodite. Bilateral lymphadenectomy was performed when the lymphnode involvement risk was >2%, according to Memorial Sloan-Kettering nomograms. Functional outcomes were evaluated at a median follow-up of 6 months. We considered fully continent the pt. who used no pad, slightly incontinent the ones who used 1 pad/die and incontinent the pt. who used more than 1 pad/die. We evaluated pre- and post-operative sexual potency using the IIEF-5 score. All pt. were pre-operative potent (IIEF-5 \geq 17). Mean age was 61 years. In the post-operative evaluation, we considered potent pt. with an IIEF-5 score \geq 17, potent with drug, the pt. who need drugs to reach the IIEF-5 score \geq 17, and impotent the pt. with IIEF-5 < 17.

Results. Mean operative time was 143 minutes. Estimated mean blood loss: 298 ml. No patient needs conversion to open surgery. Grade I complications, according to Clavien-Dindo, were 17,5% (14/80). II grade ones were 3,75% (3/80), only 1 patients (1,25%) experienced IIIb grade complication. At 1 month from surgery, 70/80 (87,5%) pt. were fully continent, 6/80 (7,5%) slightly incontinent, and 4/80 (5%) incontinent. At 6 months 92,8% (65/70) were continent and 5 (7,2%) were slightly incontinent. After surgery 65/80 (81,25%) pt. were potent, 38/65 (58,45%) without use of drugs and 27/65 (41,55%) potent with drug. 15/80 (18,75%) pt. were impotent. The Gleason Score (GS) upstaging on specimen, occurred in 26,25% (21/80) of cases. Positive surgical margins (PSMs) were retrieved in 15% of pt. (12/80), of which 41,6% (5/12) focal PSM, and 16,6% (2/12) multiple PSMs. 50% (6/12) of pt. with PSMs experienced also a GS upstaging, no one of them with lymphnode involvement. 11,25% of pt. (9/80) needed adjuvant RT.

Discussion. The 360° preservation of the Veil of Aphrodite consents a wide preservation of the neuro-vascular structures, who surrounded the prostate. In low risk disease, the possibility to perform an intrafascial technique should not be compromised by the greater risk to observe PSMs, considering the reduced prognostic impact of focal PSMs in pt. without GS upstaging. Reaching earlier continence and potency, constituted an important psychological factor for these pt. Upstaging risk persists in this kind of surgery. In these cases the adjuvant RT becomes needful in presence of PSMs.

Conclusion. The intrafascial technique consents to reach good functional results and low rates of complications, maintaining good oncological outcomes.

POSITIVE SURGICAL MARGINS AFTER MINI-INVASIVE RADICAL PROSTATECTOMY: A MULTI-INSTITUTIONAL STUDY

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Aim of the study

Positive surgical margins (PSMs) are a known risk factor for biochemical recurrence in prostate cancer (Pca) and are potentially affected by surgical technique. We investigated whether mini-invasive radical prostatectomy (RP) modality affects PSM rates and analyzed the incidence and the associative factors for PSMs in a multi-institutional series of 1357 robotic and 635 laparoscopic RP.

Materials and methods

We retrospectively analyzed 1992 patients with clinically localized Pca treated with laparoscopic RP (LRP) or robot assisted RP (RARP) by one of 35 surgeons from eleven institutions in Italy between January 2008 and March 2014. We had no data about margin status in 177 patients (123 LRP, 54 RARP). Patients were excluded from analysis if they had previously received androgen deprivation therapy or radiation therapy to the pelvis. PSMs were defined as cancer at the inked margin. 1159 patients were available for multivariate analysis.

Results

PSM rates were 24,1% and 20,2% for RARP and LRP respectively (p=0,074). Pathological stages were pT2 in 84,6% and pT3 in 15,4% of patients for LRP and pT2 in 75,8% and pT3 in 24,2% of patients for RARP (p)

Discussion

In our cohort PSA and NS procedure had no statistically significant impact on the PSM rates on multivariate analysis. There was no significant difference on PSM rates between the two analyzed surgical technique, however RARP tended to have higher rates. This may be explained with more pT3 and pG5 \geq 7 patients present in the RARP cohort, which were the most important predictive factors for PSMs on multivariate analyses, and the possible presence of the robotic RP surgeons at their initial learning curve. Limits of this study are: it's not randomized nature, missing data across covariates, lack of central pathology review, lack of information for potential confounders (comorbidity, tumor volume, surgeon case-load and non entering on multivariate analysis other variables such body mass index, preoperative GS and clinical stage).

Conclusions

There is no significant difference between LRP and RARP for PSMs, with tendency of the robotic modality to operate higher pT stage Pca patients. Pathological stage and postoperative GS were the most important factors independently associated with an increased risk of PSMs after mini-invasive RP