

Salvage Radical Prostatectomy for Recurrent Prostate Cancer: Oncological outcomes of a large multicentre series.



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Objectives: Salvage radical prostatectomy (sRP) is a curative option in men with biochemical recurrence (BCR) after primary treatment. High complication rates and poor outcomes were reported by older series. Contemporary oncological outcomes of sRP were investigated in large recent series.

Methods: Six hundred and fifteen patients with BCR underwent sRP at 18 tertiary referral centres, between 2000 and 2016. Pre-, intra and post-surgery clinical and histological data were retrospectively registered. We excluded patients with a follow-up shorter than 6 months or insufficient data. Continuous variables were compared using Wilcoxon-Mann-Whitney test; differences in categorical variables were assessed by Chi-square or Fisher's exact tests.

Results: Inclusion criteria were reached by 349 men. At first diagnosis, PCa had been treated by radiotherapy, brachytherapy, cryotherapy, HIFU or other primary treatments (in 3.3% of the cases). Age at sRP was 66.2 (IQ 62.0-70.3) ys, whilst PSA before surgery was 4.3 (IQ 2.5-7.3) ng/mL. No patient had radiological evidence of extra-nodal metastases before salvage treatment and 6.87% (n=24) had castration resistant prostate cancer (CRPC). More than half of the patients (64%) had an ASA score was lower or equal to 2. Extended or super-extended lymphadenectomy patterns (the latter including retroperitoneal nodes) were performed in n=53 (15.18%). A nerve-sparing (full or partial) approach was attempted in n=27 (7.7%). Median operating time was 3h7' (IQR 2h27'-4h7'). Median blood loss was 300 (IQR 150-500) mL. At final pathology, GS ≤ 7 was present in 56.6%, and organ-confined disease (T stage =2) was diagnosed in 40.9%. Around 1 out of 6 patients had N1 disease (15.75% nodal involvement). Positive surgical margins were observed in 33.8% (n=118). After a 3.24-year follow-up (IQ 1.88-5.34), 48.3% of the men were BCR-free, and 14.9% had CRPC. Five-year BCR-free, cancer specific and overall survival were 35.0%, 94.8% and 91.7% respectively.

Conclusions: Salvage surgery may entail promising oncological results for recurrent PCa, in the short-to-medium term. However, rates of positive surgical margins and recurrence are considerable. To investigate the benefits of sRP and to improve criteria of patient selection long-term prospective studies are needed.

