

Impact of positive surgical margins in patients with localized prostate cancer who underwent radical prostatectomy



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INTRODUCTION

Several studies have shown that positive surgical margins (SM) are associated with BCR and need for salvage treatments.

OBJECTIVES

The aim of our study was to evaluate the impact of positive (SM) in patients with localized PCa who underwent radical prostatectomy (RP), evaluating BCR, survival and need for additional treatments.

PATIENTS AND METHODS

Retrospective analysis of 377 consecutive open RP performed between 2009 and 2016, with localized PCa. Patient demographics, prostate volume, prostate-specific antigen (PSA) levels, definitive pathology, surgical margin status, BCR presence, additional treatments and survival were analyzed.

RESULTS

• Mean age: 63.0 ± 6.8 years

Mean preoperative PSA value was 8.5 ± 8.7 ng/ml

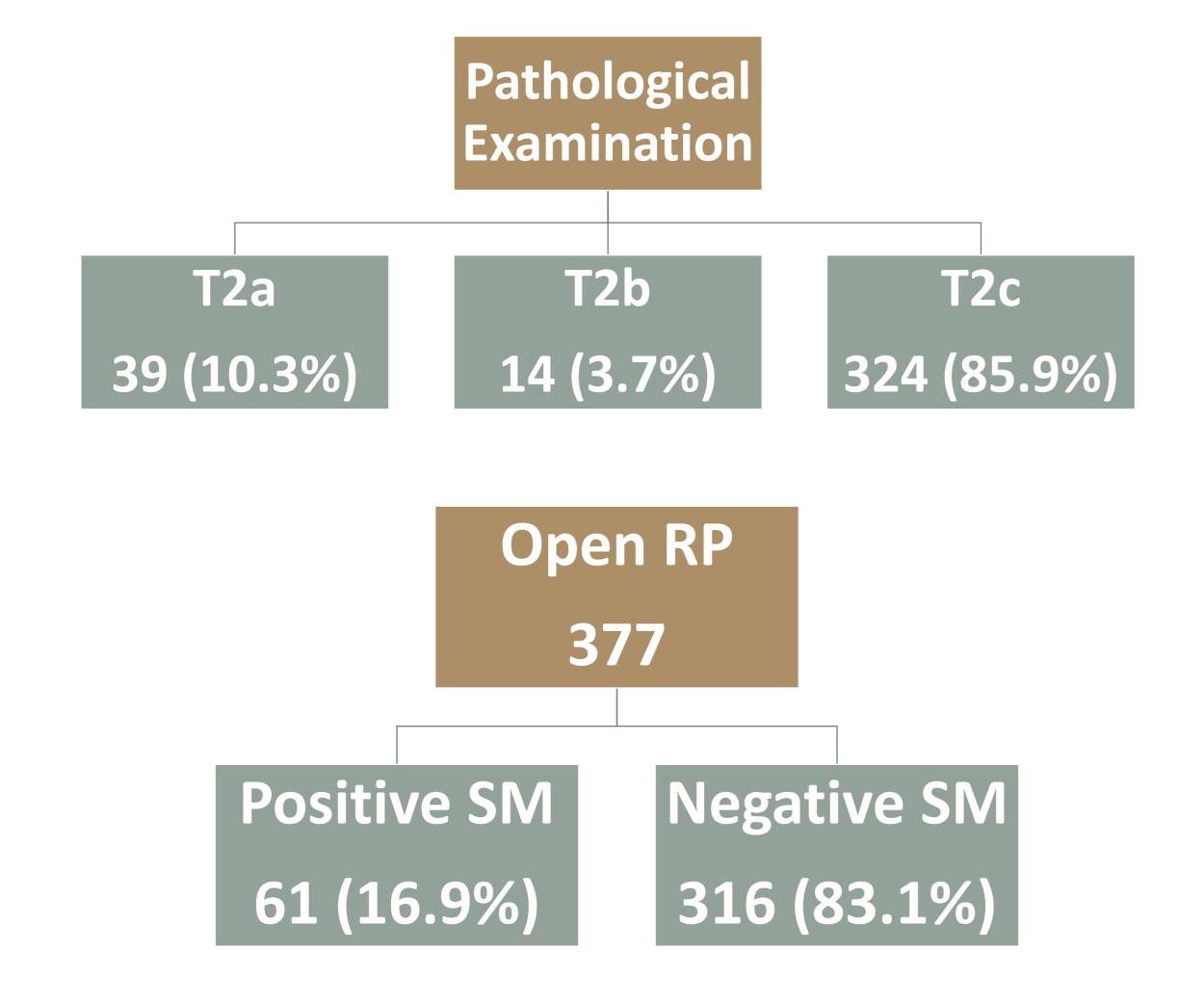


Table 1. Demographics and disease characteristics by margin status

	Positive SM	Negative SM	p Value
Patients (%)	61 (16.2%)	316 (83.1%)	-
PSA pre-RP, ng/ml (mean ± SD)	10.0 ± 11.6	8.2 ± 8.0	n.s.
Age at RP, years (mean ± SD)	62.5 ± 8.1	63.2 ± 6.5	n.s.
RP specimen Grade group (%)			
Grade Group 1	9 (14.8%)	113 (35.8%)	
Grade Group 2	47 (77.0%)	183 (57.9%)	
Grade Group 3	5 (8.2%)	15 (4.7%)	n.s.
Grade Group 4	0 (0%)	4 (1.3%)	
Grade Group 5	0 (0%)	1 (0.3%)	
Prostate size, cc (median)	43.7(20-105)	51.5 (16-163)	0.01
Perineural invasion (%)	51 (89.5%)	214 (73.0%)	0.05
BCR rate (%)	16 (26.3%)	50 (15.9%)	0.05
Time to BCR, years (mean ± SD)	2.3 ± 1.8	2.9 ± 2.1	n.s.
Salvage radiotherapy (%)	10 (16.4%)	41 (13.0%)	n.s.
Androgen deprivation therapy (%)	6 (9.8%)	9 (2.8%)	0.01
Distant metastases (%)	3 (4.9%)	7 (2.2%)	n.s.
Overall mortality (%)	2 (3.3%)	22 (7.0%)	n.s.

- Thirteen (21.3%) patients with positive margins performed adjuvant radiotherapy (RT). Overall survival of patients with positive SM was 100% in those who did adjuvant RT and 95.8% in those who did not perform adjuvant RT.
- However, the cause of death in the two deceased patients was not related to PCa.
- No patient has been proposed for therapy with abiraterone, enzalutamide or docetaxel.
- Two (3.3%) patients with positive SM developed lymph nodes metastasis and one (1.6%) developed bone metastasis.

DISCUSSION/CONCLUSION

Our study showed no prognostic advantage of adjuvant RT compared with salvage RT in patients with positive SM. Although there appears to be a trend towards a higher rate of BCR, a shorter time from surgery to the development of BCR and a higher rate of hormone therapy, the presence of positive SM does not appear to have a significant impact on disease progression and survival in patients with organ confined PCa.





