

# Risk factors for peri-operative high-grade complications in patients treated with robotic radical prostatectomy



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## OBJECTIVE

- ✓ To evaluate the risk factors for perioperative high-grade complications in patients treated with with robotic assisted radical prostatectomy (RARP)

## MATERIAL & METHODS

- ✓ Between 2012 and 2017, a consecutive series of patients with prostate cancer were treated with robotic radical prostatectomy (RRP)
- ✓ Demographic, clinical and histological characteristics of the patients were recorded
- ✓ Histological specimens were graded according to the new PGG classification
- ✓ Complications were classified according to the modified Clavien classification system (CCS)
- ✓ Logistic regression analysis were performed to evaluate the risk of high grade complications (CCS≥3a) complications

## CONCLUSIONS

- ✓ High grade complications are uncommon event in patients treated with RARP
- ✓ Higher ASA score still present a significant risk when a non nerve sparing procedure is performed
- ✓ Our results if confirmed could be use to counsel patients before surgery

**Table 1 : Characteristics of patients according to No/Low Grade vs High Grade Complications**

	Overall	No / Low grade Complications (CCS<3a)	High Grade Complications (CCS≥3a)	p
<b>Patients</b>	9273	8950 (97%)	323 (3%)	
<b>Age</b>	65 (IQR 60-69)	65 (IQR 60-69)	66 (IQR 61-71)	0,025
<b>BMI</b>	27 (IQR 25 -29)	27 (IQR 25-29)	28 (IQR 25-30)	0,010
<b>Prostate Volume</b>	38 (IQR 29-50)	38 (IQR 29-50)	40 (IQR 29-55)	0,027
<b>ASA Score</b>				
<b>1</b>	2398 (26%)	2321 (25%)	77 (23%)	0,010
<b>2</b>	5920 (64%)	5729 (64%)	191 (59%)	
<b>3</b>	931 (10%)	880 (10%)	51 (16%)	
<b>4</b>	4 (<1%)	2 (<1%)	2 (<1%)	
<b>ASA Score≥3</b>	955 (10%)	900 (10%)	55 (17%)	0,010
<b>Nerve Sparing</b>	8724 (94%)	8438 (94%)	286 (88%)	0,010
<b>Positive SM</b>	1002 (11%)	949 (10%)	53 (16%)	0,010

**Table 2 : Multivariate Analysis to predict High grade complications**

High grade complications	Univariate OR 95%CI	p	Multivariate OR 95%CI	p
BMI	1,05 (1,01-1,07)	0,001	1,05 (1,01-1,07)	0,020
Prostate Volume	1,01 (1,00-1,01)	0,001	1,01 (1,00-1,01)	0,045
ASA Score ≥3	1,4 (1,09-2,06)	0,001	1,50 (1,09-2,06)	0,001
Nerve Sparing	0,6 (0,35-0,72)	0,001	0,50 (0,35-0,72)	0,001

## REFERENCES

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