

# Complications of post chemotherapy retroperitoneal lymph node dissection for advanced testicular cancer

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## Conclusions

This is the first population based study covering postoperative complications after PC-RPLND.

Severe postoperative complications (Clavien  $\geq 3b$ ) after PC-RPLND, were at a low rate in this population based cohort.

Nerve-sparing technique reduce the risk of retrograde ejaculation, but not to the level of the high volume centers results.

Bilateral RPLND results in more intra- and postoperative complications compared to unilateral dissection.

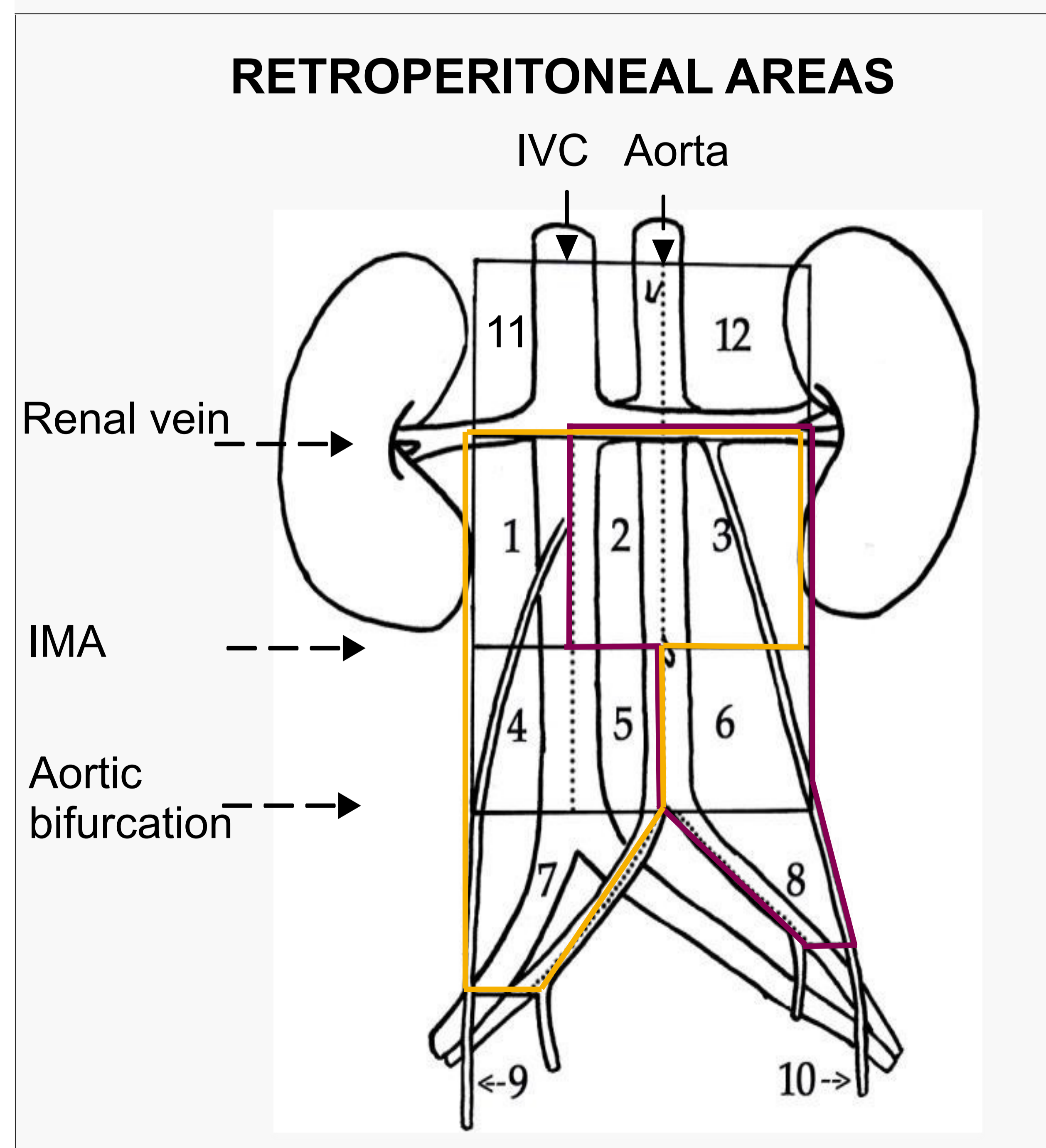
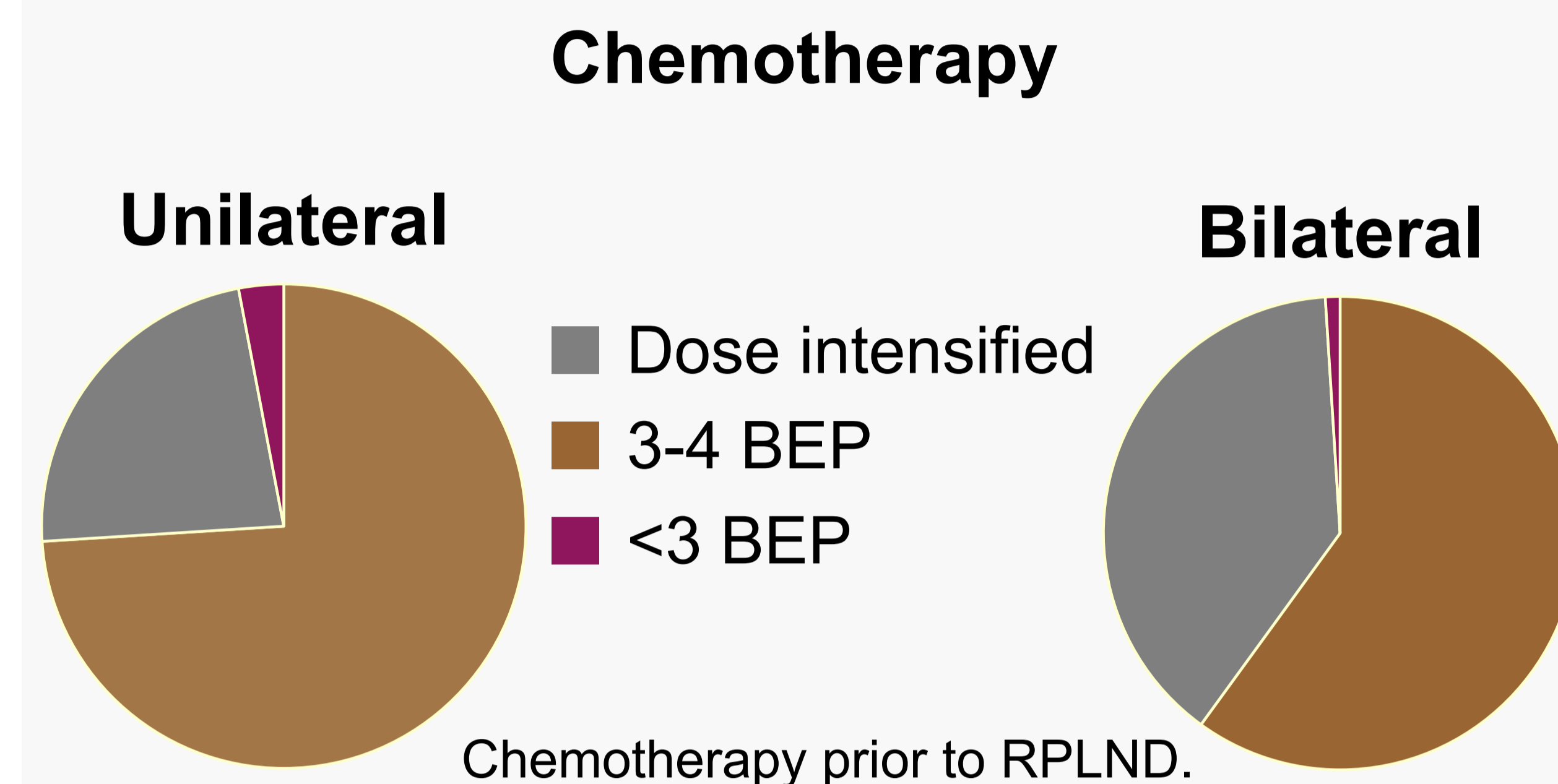
## Introduction and objective

This population based study aims to investigate the intra- and postoperative complications after post chemotherapy retroperitoneal lymph node dissection (PC-RPLND), in metastatic non-seminomatous testicular cancer (NSGCT). Previous work on this subject reflects outcome in high volume centers.

## Methods

All men with NSGCT in Sweden and Norway undergoing PC-RPLND from Sept 2007 to Sept 2014 at 10 tertiary centers were included. RPLND were performed as bilateral or unilateral, nerve-sparing or non nerve-sparing technique.

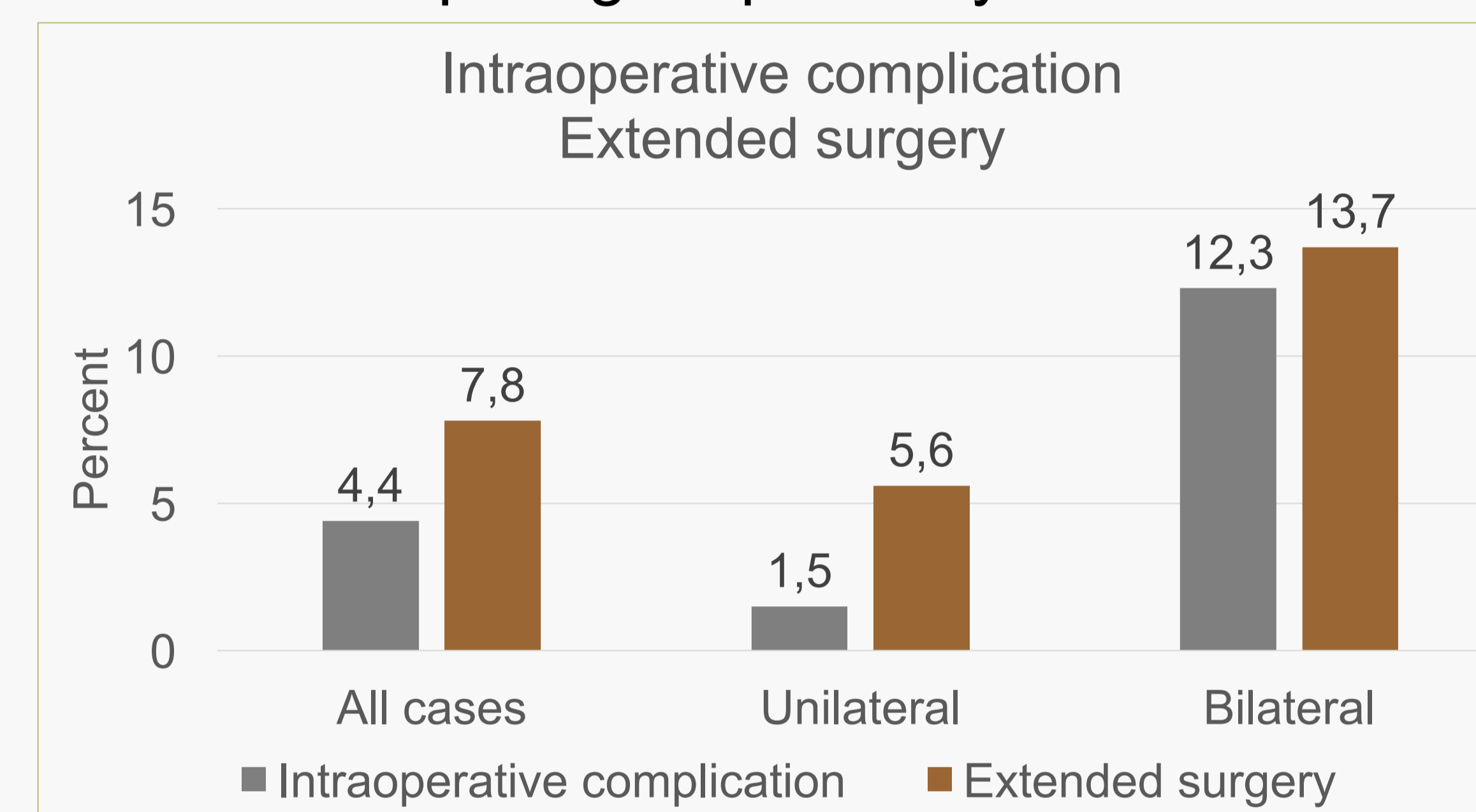
Intraoperative complications and extended surgery were recorded. Postoperative complications 0-30 days were classified by the Clavien-Dindo classification.



Retroperitoneal areas  
 Right sided unilateral RPLND ■ + Spermatic vein  
 Left sided unilateral RPLND ■ + Spermatic vein  
 Bilateral RPLND ■ + ■ + Spermatic vein

## Results

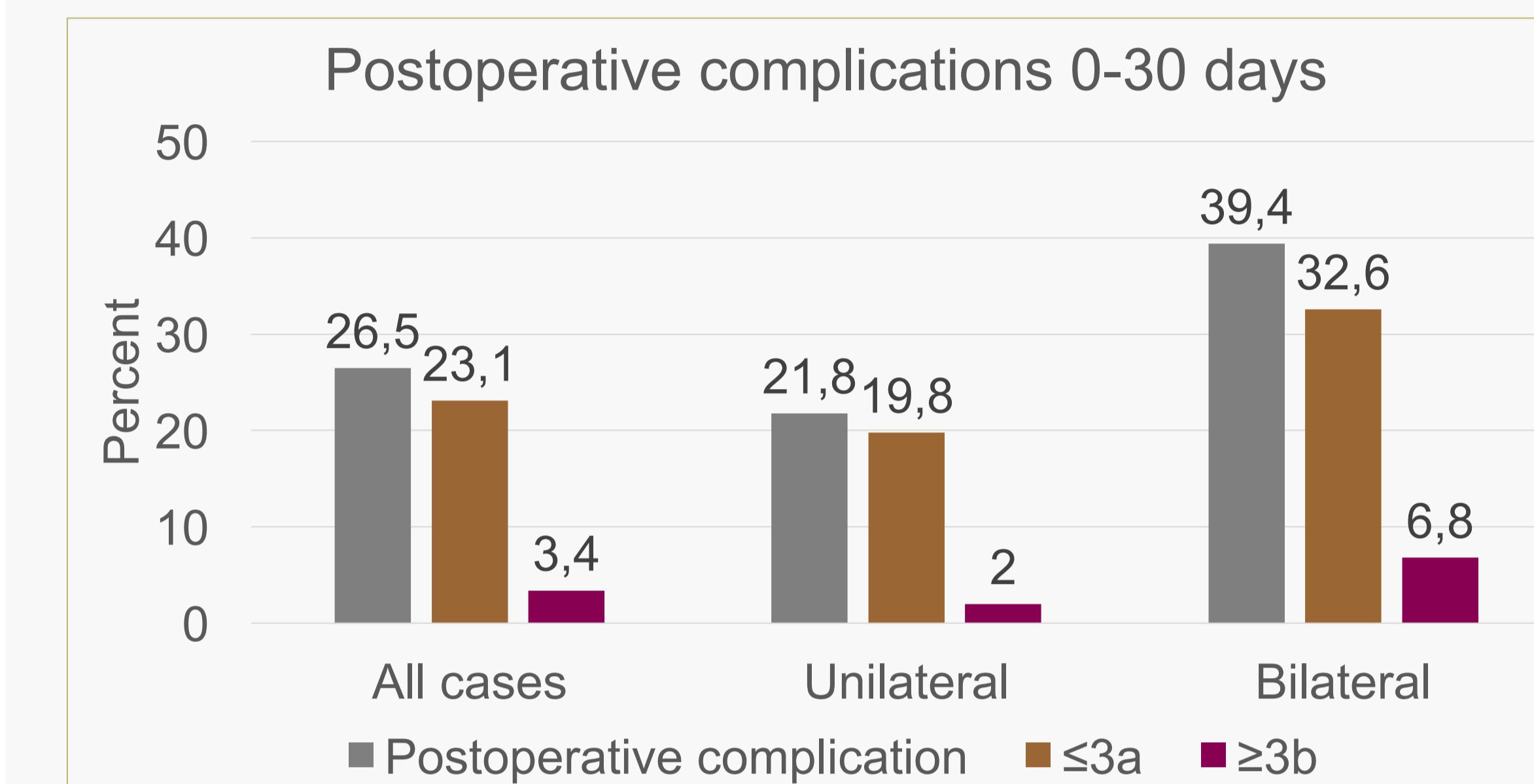
Of the 268 PC-RPLND performed, 195 were uni- and 73 bilateral, of which 36% and 21% were nerve-sparing respectively.



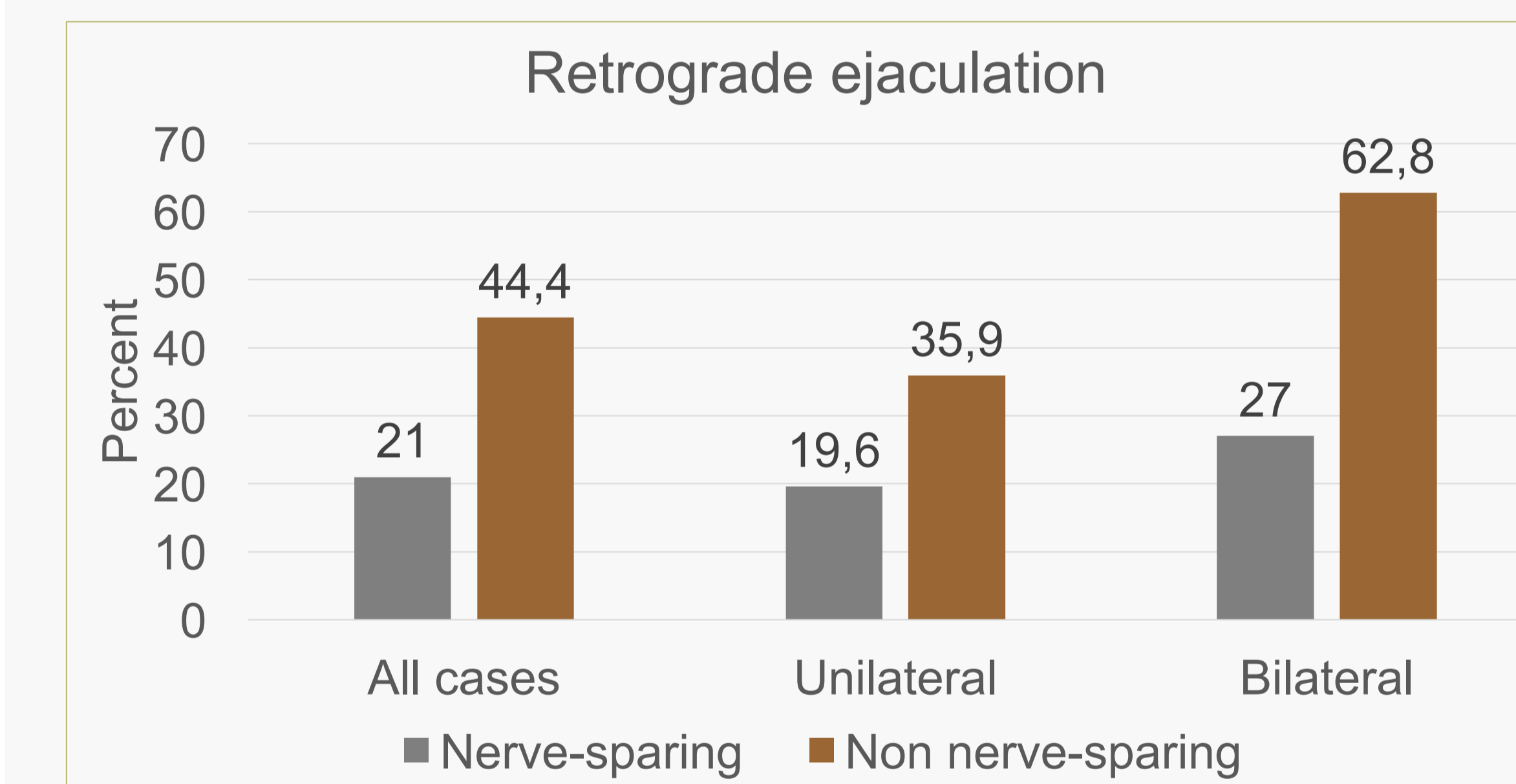
Intraoperative complications were injury to blood vessel, bowel or ureter. Extended surgery were procedures such as nephrectomy or v. cava resection.

Intraoperative complications were more frequent in the bilateral group. In 7,8% of all cases, extended surgery were required for complete tumour removal.

In total, 61 patients (23%) had a Clavien  $\leq 3a$  complication and 9 (3%) had a Clavien  $\geq 3b$  complication, including one death after postoperative bleeding.



Postoperative complications (0-30 days) graded by the Clavien-Dindo classification.



Retrograde ejaculation after PC-RPLND  
 After nerve-sparing RPLND, 20% in the unilateral group had retrograde ejaculation, compared to 36% after non-nerve sparing procedure ( $p=0,042$ ). For bilateral RPLND, corresponding results were 27% and 63% ( $p=0,034$ ).

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