New Approaches in potency preservation in RARP: comments

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Nerve Spare: what is important?

1. spare the nerves
2. “non touch technique”
3. spare blood supply
Nerve Spare: what is important?

1. spare the nerves

Surgical Anatomy of the Prostate

Dr Pat Walsh

“it is humbling to realize that even today basic anatomy may not be known or understood”

J Urol 1998; 160:2418

“you only see what you are looking for and you only look for what you know”

AUA Course, 2006, Atlanta
Nerve Distribution Along the Prostatic Capsule

- Permanent sections of 31 patients, who underwent non-nerve-sparing RP
- Whole mount sections of prostates
- Analysis of the distribution of the nerves along the prostatic capsule

Eichelberg et al, Eur Urol 2007;51:105-111
Nerve Distribution Along the Prostatic Capsule

20-25% of nerve fibers in the ventral circumference

Eichelberg et al, Eur Urol 2007;51:105-111
Sparing neurovascular bundles

Veil of Aphrodite

- Prostatic Fascia
- Periprostatic fascia
- Anterior layer of Denonviller’s fascia
- Neurovascular bundle
- Pelvic plexus
- Rectum
- Post Denonviller’s

M. Menon, P. Walsh
How Anatomy Translates into Surgical Technique: Nerve-Sparing Surgery

Regardless of the technology and the type of intervention chosen, the recognition of three surgical approaches that ultimately refer to the relationship between neurovascular bundles (NVB) and periprostatic fascia (PPF) is compulsory for functional outcomes:

- Intrafascial dissection
- Interfascial dissection
- Extrafascial dissection
Different degrees of dissection correspond to different degrees of NVB preservation at pathological analysis.

Nerve Spare: what is important?
1. spare the nerves

RP specimen
Thin layer of visceral Fascia left on the prostatic Pseudo capsule
Nerve Spare: what is important?

2. Non touch technique

Nervous tissue very fragile to traction

- neuropraxia

- High release: dissecting prostate away from periprostatic tissue
The videos
Intrafascial dissection

ROBOT ASSISTED RADICAL PROSTATECTOMY
INTRAFASCIAL vs INCREMENTAL NERVE SPARING
Dr. A. Mottrie
Dr. F. Turri
Nerve Spare: what is important?

3. Save vasculature

Point No. 3

Saving aberrant or accessory pudendal arteries
(prevention of arteriogenic ED)
Nerve Spare: what is important?

3. Save vasculature
Nerve Spare: what is important?

3. Save vasculature

Congenitally single aberrant pudendal artery

Nerve Spare: what is important?

3. Save vasculature
CONCLUSIONS

- higher dexterity
- miniaturisation of movements
- Increased visualisation

> robotic surgery eases nerve sparing procedure