Workshop ICS Barcelona 26.08.10: Physiotherapy Round Table- Inge Geraerts
Sexual function after radical prostatectomy: is there need for physiotherapy?

Case study: patient who underwent a radical prostatectomy with remaining erectile dysfunction one year after surgery.

1. Treatment options for radical prostatectomy
   - Watchful waiting
   - External beam radiotherapy
   - Radical prostatectomy (RP): open (retropubic)/ laparoscopic/ robotic

2. Most common postoperative problems remain urinary incontinence and erectile dysfunction.
Definition of erectile dysfunction: the persistent inability to attain and maintain an erection with sufficient rigidity to perform satisfactory penetrative sexual activity.
Literature: large potency rates among for nerve-sparing (NS) radical prostatectomy

1NS/2NS	**ORP**	**LRP**	**RALP**
Coehlo 2010	43.1-60.6%	31.1-54%	59.9-93.5%
Ficarra 2012	26-63%	32-78%	55-81%

3. The pathophysiology of erectile dysfunction after radical prostatectomy.
- Injury to the cavernous nerves
- Changes in the corpus cavernosum secondary to denervation of the erectile tissue
- Division of the accessory pudendal arteries
- Increase in collagen deposition and fibrotic changes in the penis

Recovery of sexual function can take up to 2 years or more. Furthermore radical prostatectomy may also affect orgasm.

4. Evaluation of erectile dysfunction
- Since 1997 => International Index of Erectile Function (IIEF) (http://www.dcurology.net/forms/iief.pdf)
  - ⇨ 15 items in different domains: erectile function, orgasmic function, sexual desire, intercourse satisfaction and overall satisfaction.
  - ⇨ Not a perfect tool: no full understanding of the content of the questions, not sensitive enough to detect small differences in recovery
- Additional questions concerning the quality of erection (hardness, length-increase of the penis during erection, tumescence, urine loss-during orgasm… + question the partner/ patient

5. Risk factors
Age, comorbidities (e.g. diabetes mellitus, cardiovascular diseases, metabolic syndrome), smoking, medications, psychological factors, physical health, education, baseline potency status, nerve sparing status, surgeon volume, erectile hemodynamic changes after surgery and prostate weight.

Literature: preoperative sexual potency in 43-84% Penson J Urol 05, Davidson Eur Urol 96, Salonia Eur Urol 06
CAVE: discrepant results between different verbally obtained information from patient and questionnaires

6. Treatment
Literature: Currently 95% of patients (PDE-5-inhibitors), 75% (intracavernosal injections), 30% (vacuum device), 9.9% (medicated urethral system for erection). CAVE: Large discontinuation rate. Teloken 09

Several studies: positive results after PFMT for men with ED. However: different programs used and often small sample sizes. Only 2 RCT's.

Author	Diagnosis	N	Therapy content	Therapy (months)	Normal	Improved	Failed
Dorey 04	ED	55	PFMT, BF	6	40%	35.5%	24.5%
Prota 12	ED after RP	52	PFMT after cath removal	3	47% (12M)		