

Istituto Nazionale Tumori  
**Fondazione G. Pascale**

# La riabilitazione erettile nella chirurgia demolitiva del pavimento pelvico

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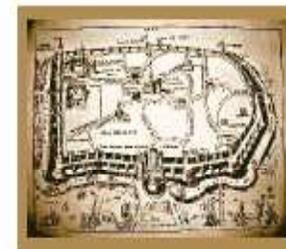


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**11 dicembre 2007**

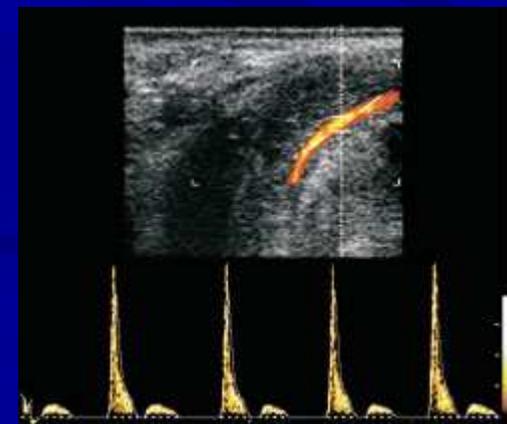
Con il Patrocinio del Comune di Nola,  
del Comune di Cimitile, della ASL NF 4

# Disfunzione erettile: Valutazione

➤ IIEF 5

➤ Rigiscan

➤ Ecodoppler penieno



La Sua **capacità di raggiungere e mantenere l'erezione** è stata:

Molto bassa	Bassa	Moderata	Alta	Molto alta	
1	2	3	4	5	

Dopo la stimolazione sessuale ha raggiunto un' **erezione sufficiente per la penetrazione**:

Non ho avuto alcuna attività sessuale	Quasi mai / mai	Poche volte	Qualche volta	La maggioranza delle volte	Quasi sempre/sempr
0	1	2	3	4	5

Durante il rapporto sessuale, è riuscito a **mantenere l'erezione** dopo la penetrazione:

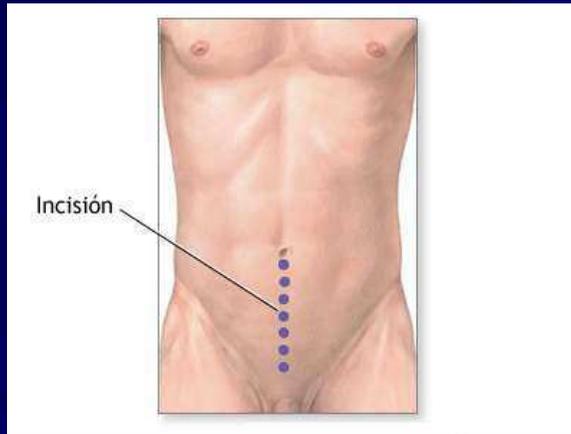
Non ho tentato di avere rapporti sessuali	Quasi mai / mai	Poche volte	Qualche volta	La maggioranza delle volte	Quasi sempre/sempr
0	1	2	3	4	5

Durante il rapporto sessuale, **mantenere l'erezione** fino alla fine del rapporto è stato:

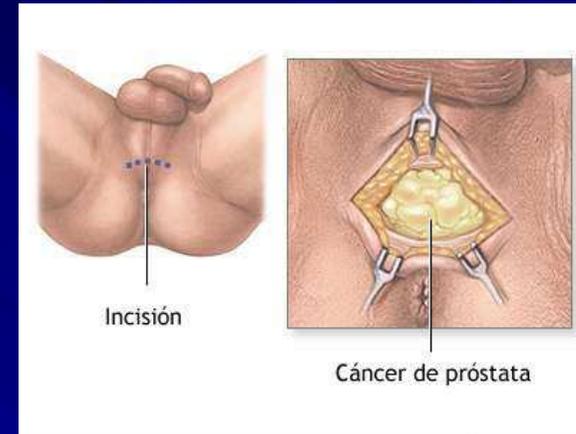
Non ho tentato di avere rapporti sessuali	Estremamente difficile	Molto difficile	Difficile	Abbastanza difficile	Facile
0	1	2	3	4	5

Quando ha avuto un rapporto sessuale, ha provato **piacere**:

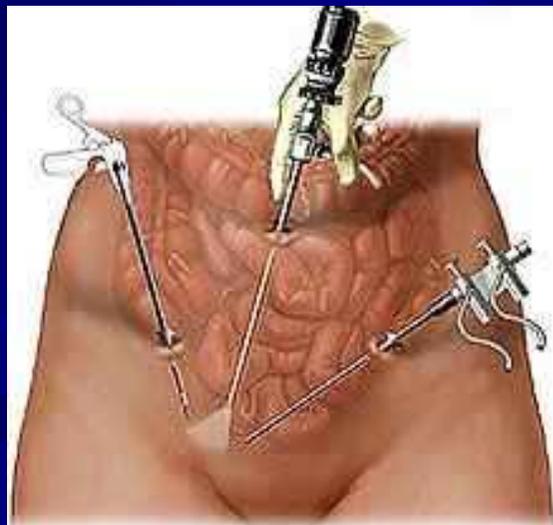
Non ho tentato di avere rapporti sessuali	Quasi mai/ mai	Poche volte	Qualche volta	La maggioranza delle volte	Quasi sempre/sempr
0	1	2	3	4	5



Retropubica



Perineale



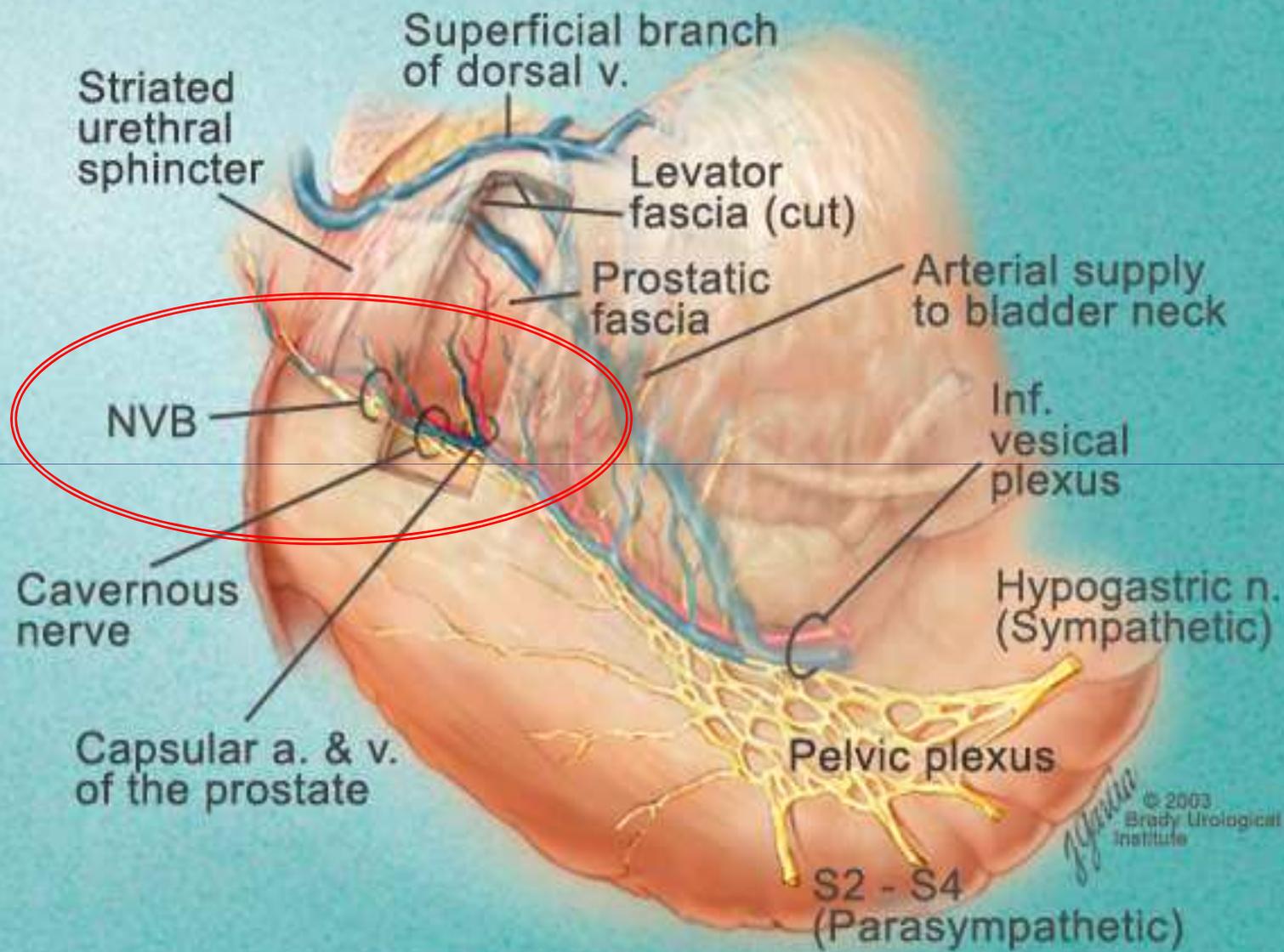
Laparoscopica



Robotica

# Recupero dell' erezione dopo prostatectomia radicale: Fattori prognostici positivi

- Erezione preoperatoria
- Età
- Inizio precoce di uno specifico programma per il recupero dell' erezione
- Risparmio delle benderelle neurovascolari (NVB)



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Institute



Importanza dell'  
abilità e dell'  
esperienza del  
chirurgo



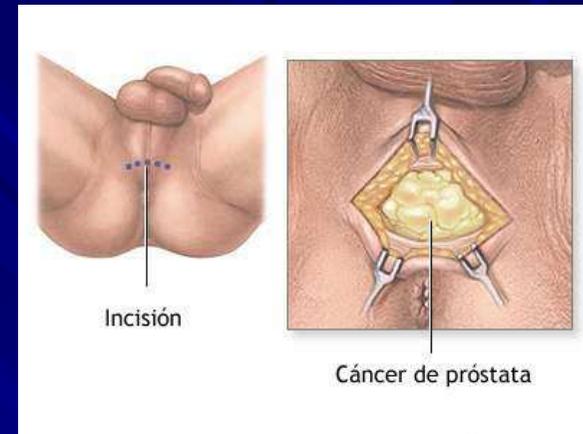
# DE secondaria a Prostatectomia radicale retropubica

Study references	No. of subjects	Age (range)	Neurovasc. Bundles spared (no.)	% potency before	% potency after operation	% potency by age (years)
Penson 2005 [7]	1213	39-79	Unilateral, Bilateral, non-nerve-sparing	81	23; 40 and 23 overall 17 <sup>e</sup> and 28 <sup>f</sup>	61 (39-54); 49 (55-59); 44 (60-64); 18 (≥65)
Kundu 2004 [9]	1834	61 (36-80)	Unilateral (64), Bilateral (1770)	84	53 and 76, overall 75	92 (40-49); 85 (50-59); 70 (60-69); 51 (≥70)
Tsujimura 2004 [22]	67	67.7	Unilateral (18), Bilateral (9), non-nerve-sparing (49)	100	44,7; 55.6 and 14.2	-
Schover 2002 [6]	569	68.1 <sup>d</sup>	Unilateral (90), Bilateral (240), non-nerve-sparing (239)	64 <sup>d</sup>	13; 18 and 5	-
Noldus 2002 [20]	289	62.5 (42-74)	Unilateral (229), Bilateral (60)	100	16.1 and 51.7	19 vs 45 (<60); 13 vs 38 (≥60)
Walsh 2000 [3]	64	57 <sup>b</sup> (36-67)	Bilateral (89%)	100	86	100 (30-39); 88 (40-49); 90 (50-59); 75 (60-67)
Stanford 2000 [19]	1291	62.9 (39-79)	Unilateral, Bilateral, non-nerve-sparing	72,7	41.4; 44 and 34.4 <sup>e</sup> overall: 40.1	-
Rabhani 2000 [24]	314	60.5 <sup>b</sup> (37-81)	Unilateral (26), Unilateral/Bilateral damage (107), Bilateral (181)	100	21; 41 and 55	61 (≤60); 42 (60.1-65) and 31 (>60)
Catalona 1999 [4]	858	63 (38-79)	Unilateral (60), Bilateral (798)	100	47 and 68	48 vs 71 (<70); 40 vs 48 (≥70)
McCammon 1999 [23]	203	62.8 (44-74)	Unilateral (95), Bilateral (31), non-nerve-sparing (72)	-	30.5; 35.1 and 16.6 overall: 33.3	-
Davidson 1996 [11]	83	63 (45-76)	Unilateral (17), Bilateral (42), non-nerve-sparing (24)	100	24; 43 and 17 overall: 31	-
Geary 1995 [14]	459	64.1	Unilateral (203), Bilateral (69), non-nerve-sparing (187)	100 <sup>a</sup>	13.3; 31.9 and 1.1	-
Catalona 1993 [15]	295	64.2	Unilateral (59), Bilateral (236)	100	41 and 63	25 vs 75 (<60); 48 vs 60 (60-70); 38 vs 50 (>70)
Leandri 1992 [27]	106	68 (46-84)	Nerve-sparing	100	71	76 (<60); 72 (60-70); 50 (>70)
Quinlan 1991 [10]	503	59 (34-72)	Unilateral (109), Unilateral + 12 (96), Bilateral (291), non-nerve-sparing (7)	100	56; 63, 76 and 0 overall: 68	Unilat vs Bilat: 91 vs 90 (<50); 58 vs 82 (50-59); 47 vs 69 (60-69); 0 vs 22 (≥70)

<sup>a</sup> Only nerve-sparing patients.  
<sup>b</sup> Median age.  
<sup>c</sup> Only pt potent before.  
<sup>d</sup> Total group (n = 1236), not specified for treatment modalities.  
<sup>e</sup> Overall potency rate after 1 year.  
<sup>f</sup> Overall potency rate after 5 years.

**Dubbelman YD, Dohle GR, Schröder FH. Sexual function before and after radical retropubic prostatectomy: A systematic review of prognostic indicators for a successful outcome. Eur Urol. 2006 Oct;50(4):711-8**

# DE secundaria a Prostatectomía transperineale



508 Casi: While over 80% of nerve-spared patients enjoy the return of spontaneous erectile function, the men with bilateral nerve preservation note earlier and more complete return of function.

Harris MJ. Radical perineal prostatectomy: cost efficient, outcome effective, minimally invasive prostate cancer management. *Eur Urol.* 2003 Sep;44(3):303-8

# DE successiva a Prostatectomia Laparoscopica

Autore	Anno	Num di casi	Definizione di potenza sessuale	Percentuale di potenti
Stolzenburg	2005	100	IIEF	12,1 % ULNS 47,1% BLNS
Roumeguere	2003	ns	IIEF	65,3% BLNS
Link	2005	ns	EPIC	75% BLNS
Guillonnet	2002	47 selezionati	IIEF	85% erezioni spontanee 66% rapporti spontanei
Katz	2002	143	Questionario non validato (presenza di erezioni spontanee)	30% NNS 50%ULNS 87,5% BLNS

# DE successiva a Chirurgia robotica

Table 6 – Potency recovery after nerve-sparing robot-assisted laparoscopic prostatectomy

Author	Year	No. of cases	Technique	Potency definition	Data collection	Potency rates (%)		
						3-mo	6-mo	12-mo
Menon [52]	2003	100	VIP	Sexual intercourse	IIEF-5		59%	
Menon [53]	2003	200	VIP	Sexual intercourse	IIEF-5	25% (<60 yr) 10% (>60 yr)	64% (<60 yr) 38% (>60 yr)	
Bentas [46]	2003	41	Montsouris	Sexual intercourse	Questionnaire			20%
Ahlering [58]	2005	36	Modified VIP	Sexual intercourse	IIEF-5	11%		
		23	CFT			47%		
Menon [57]	2005	23	VIP	Sexual intercourse	IIEF-5			74%
		35	Veil of Aphrodite					97%
Chien [44]	2005	56	VIP	Return to baseline	UCLA-PCI	54%	66%	69%
Joseph [45]	2006	325	EX technique	IIEF > 21	IIEF-5	46%		

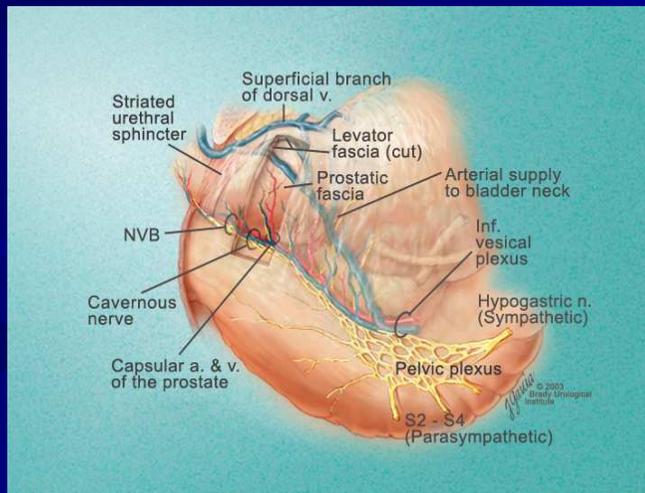
Level of evidence was 4 for all the studies.

VIP = Vattikuti Institute prostatectomy; CFT = cautery-free technique; EX = extraperitoneal; IIEF = International Index of Erectile Function; UCLA-PCI = University of California – Los Angeles Prostate Cancer Index.

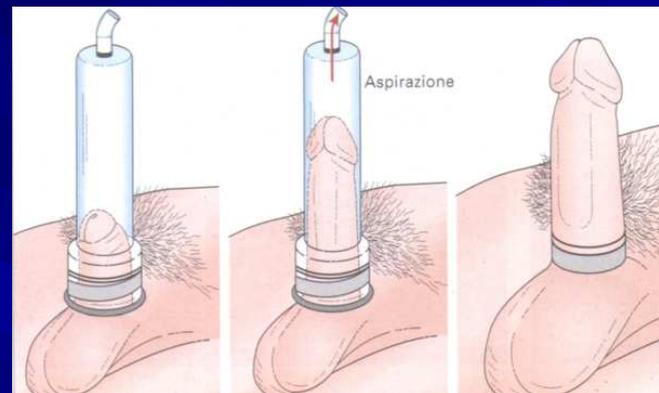
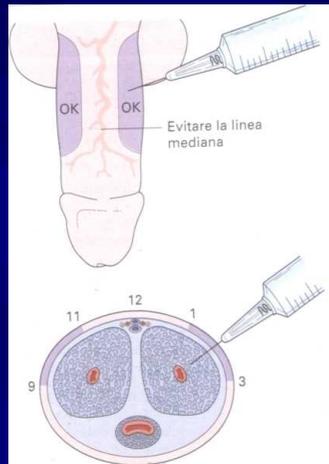
**Ficarra V et al. Evidence from robot-assisted laparoscopic radical prostatectomy: a systematic review. Eur Urol. 2007 Jan;51(1):45-55**

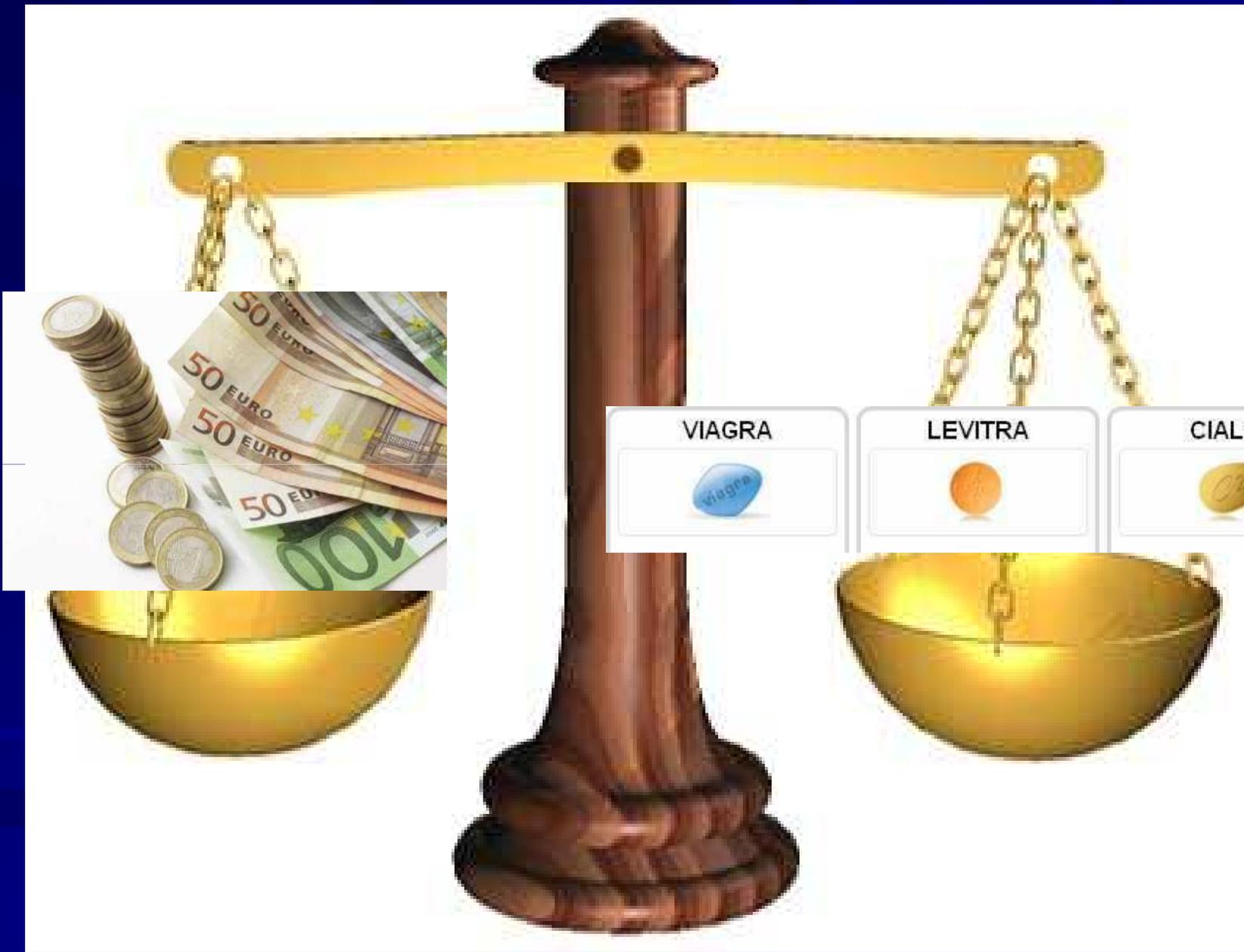
# TAKE HOME MESSAGES

- Affinché sia mantenuta l'erezione dopo l'intervento non importa quale tipo di approccio utilizzi il chirurgo urologo ma che riesca a rispettare l'anatomia della prostata e soprattutto a preservare le BNV.
- La grande variabilità nel tasso di recupero dell'erezione dipende dalla differente esperienza del chirurgo



# Recupero dell' erezione: presidi terapeutici a disposizione dell' urologo-andrologo





VIAGRA



LEVITRA



CIALIS

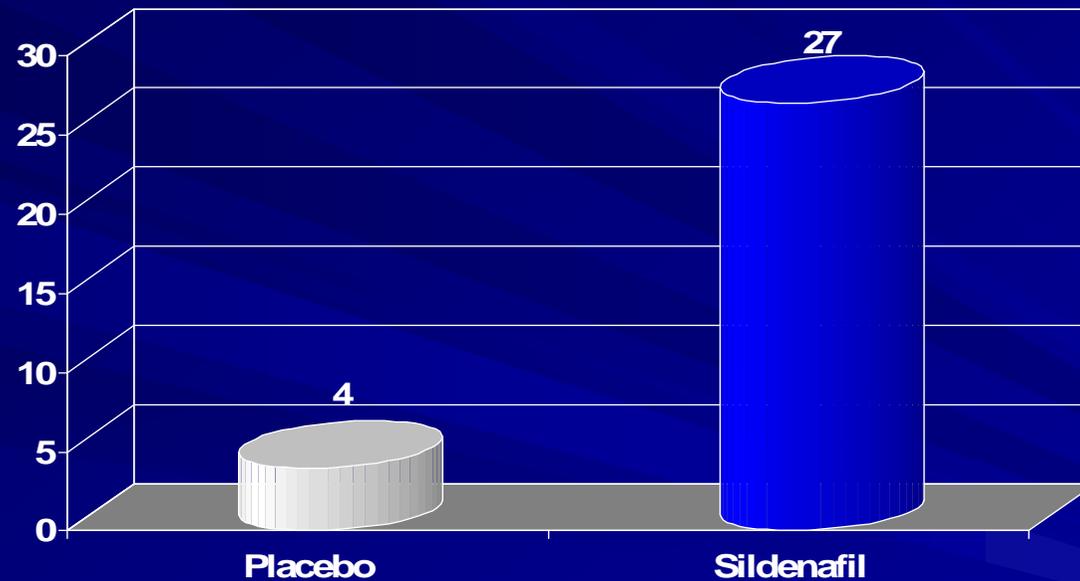


# Recupero dell' erezione dopo prostatectomia: caso ideale



- Paziente giovane, fortemente motivato, economicamente benestante con erezione preoperatoria normale
- Prostatectomia nerve sparing bilaterale
- Terapia orale quotidiana
- Vacuum device 2-3 volte al giorno
- FIC una a settimana

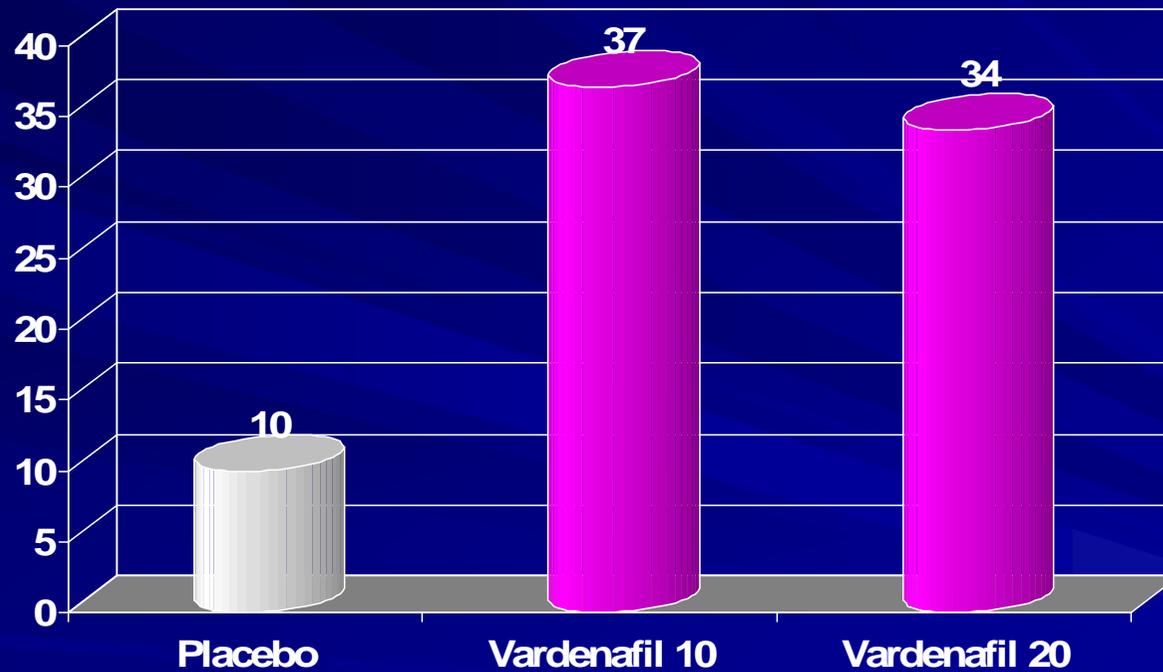
# Erectile dysfunction secondary to nerve-sparing radical retropubic prostatectomy: comparative phosphodiesterase-5 inhibitor efficacy for therapy and novel prevention strategies.



Padma-Nathan H, . Curr Urol Rep. 2004 Dec;5(6):467-71

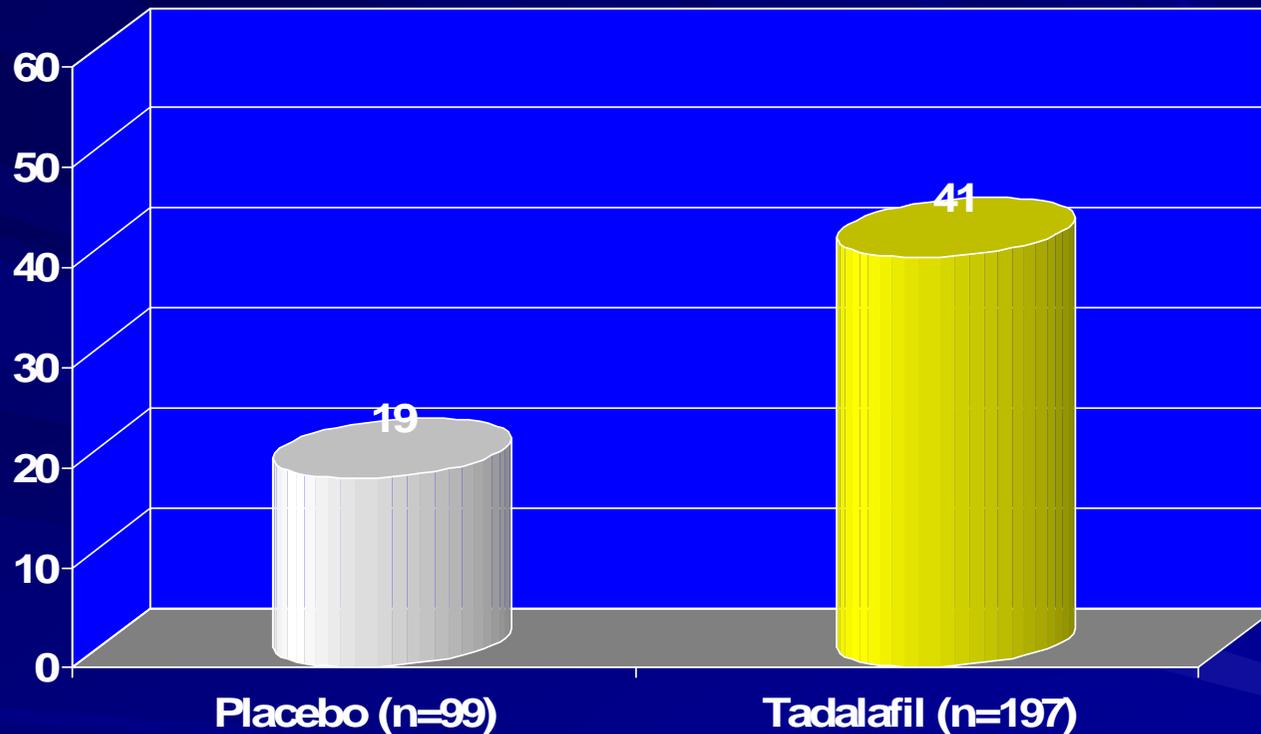
# Safety and efficacy of vardenafil for the treatment of men with erectile dysfunction after radical retropubic prostatectomy

Did your erection long last enough to complete intercourse?



Brock G, et al.. J Urol. 2003 Oct;170(4 Pt 1):1278-83

Tadalafil in the treatment of erectile dysfunction following bilateral nerve sparing radical retropubic prostatectomy: a randomized, double-blind, placebo controlled trial.



Montorsi F et al. J Urol. 2004 Sep;172(3):1036-41.

## Recovery of erection after pelvic urologic surgery: our experience

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<sup>1</sup>Division of Urology, National Cancer Institute, 'Fondazione Pascale', Naples, Italy

The incidence of erectile dysfunction (ED) in patients undergoing pelvic urologic surgery, the efficacy and tolerability of vardenafil-based rehabilitative treatment as first option in these patients, the role of spontaneous erection (SE) as a possible positive predictive factor to erection recovery after such treatment, and the role of second-line therapies in those nonresponders are evaluated. All the patients undergoing pelvic urologic surgery at our Institution between November 2002 and December 2003 were considered. Preoperative erectile function (EF) was evaluated by using the abridged five-item version of the International Index of Erectile Function (IIEF5) questionnaire. Study population was divided into separate groups considering grade of preoperative EF, nerve sparing (NS) surgery and type of procedure (radical prostatectomy, radical cystectomy (RC) or nerve and seminal sparing cystectomy). In total, 86 patients were evaluated. After 6 months, an increase in mean IIEF5 score of 12.9 points was found in those who had undergone a bilateral NSRP after vardenafil therapy, of 8.0 points in those who had undergone unilateral NSRP, of 11.3 in those who had undergone NSRC and of 11.5 in nerve and seminal sparing cystectomies. A better vardenafil response was found in patients with SE+ ( $P < 0.001$ ). Among those vardenafil notresponders, 13 were treated by using intracavernous injections, one by vacuum device and three with penile prosthesis implant. In conclusion, in our experience, vardenafil showed to be well tolerated and effective for recovery of EF in patients undergoing pelvic urologic surgery. This drug was particularly effective for those with a normal preoperative EF undergoing an NS procedure. Of course, it should be recognized that the absence of a control group in the study represents an important limitation. However, based on the data from the literature, there is a strong belief that such an approach will lead to an earlier recovery of EF than without rehabilitative treatment.

*International Journal of Impotence Research* (2005) 17, 484–493. doi:10.1038/sj.ijir.3901338; published online 12 May 2005

**Keywords:** pelvic cancer treatments and sexual dysfunction; oral vasoactive agents; pharmacologic studies in sexual function; intracavernosal therapy

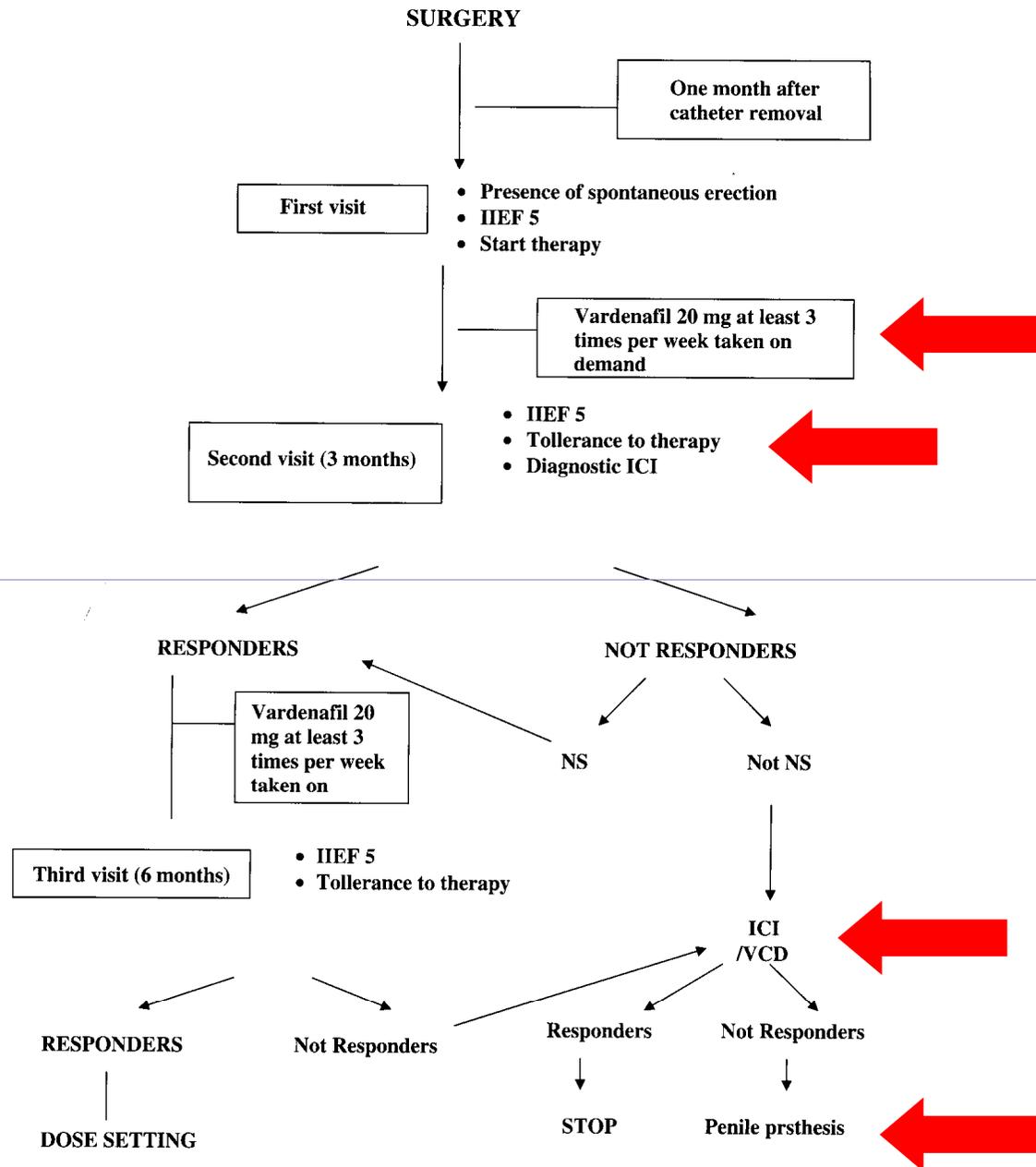
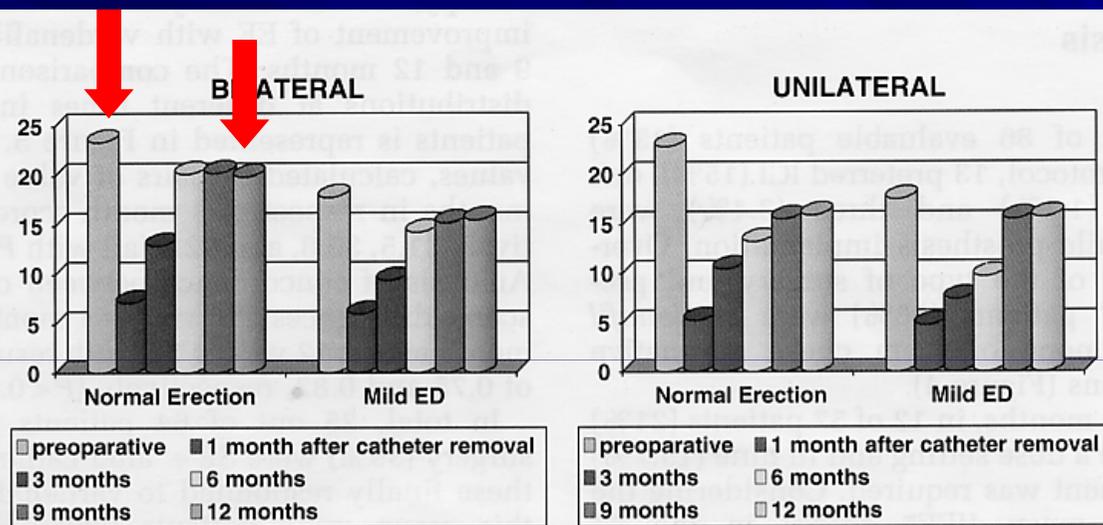


Figure 1 Scheme of study.



**Figure 2** Mean IIEF5 score variations after vardenafil therapy in bilateral and unilateral nerve sparing radical prostatectomies.

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Dottore, mi liberi dal tumore  
ma mi lasci potente e  
continente!!!!



