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Igloo technique for robot assisted radical prostatectomy:

maximum nerve sparing for early recovery of continence and sexual function

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Radical prostatovesiculectomy

Most significant complications

- perioperative morbidity
- incontinence
- erectile dysfunction

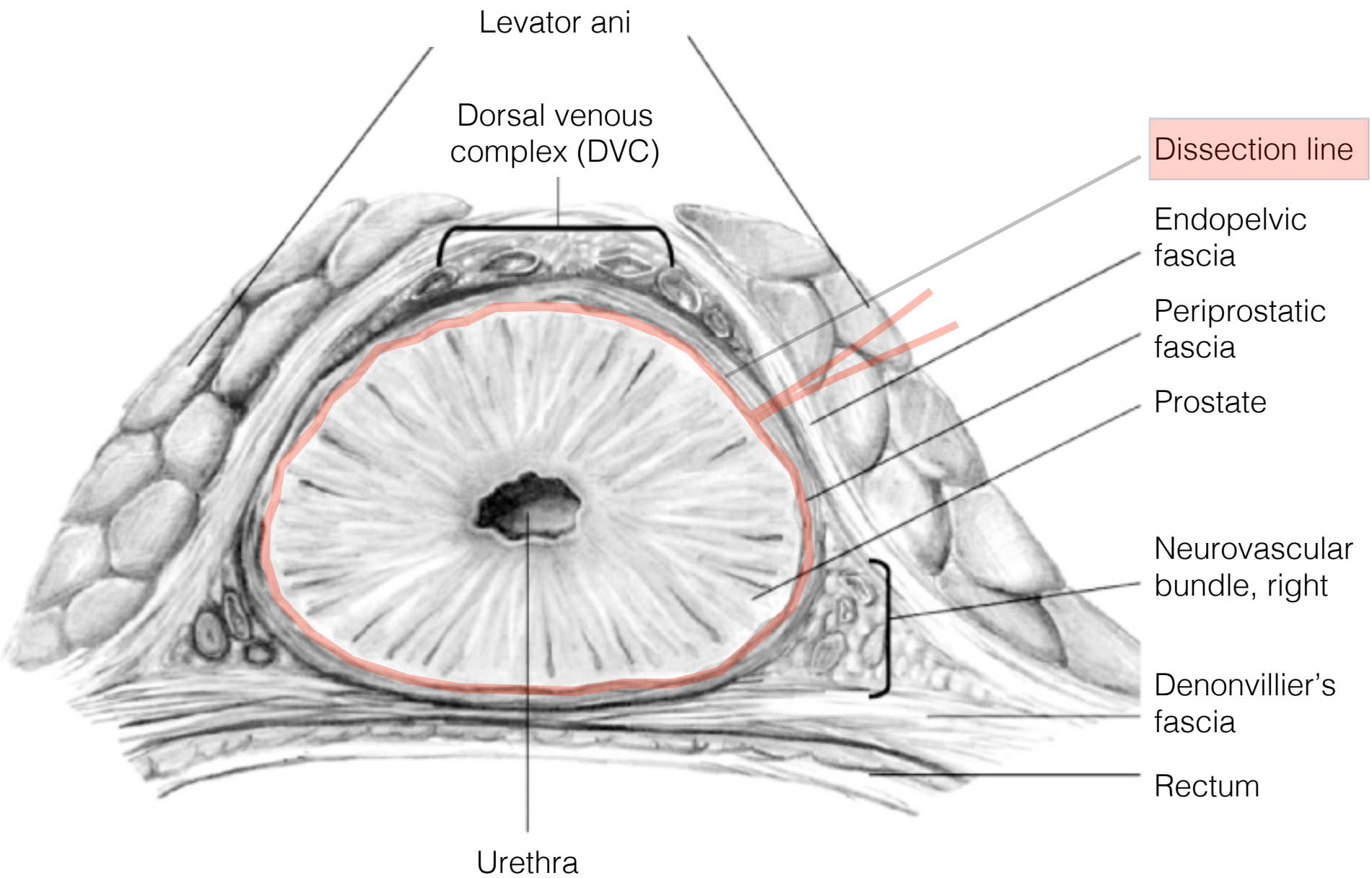
Our Igloo-Technique

- possible minimal invasive robot assisted technique of RP
- complete circumferential / intrafascial dissection using a **single lateral approach**
- preservation of **periprostatic functional structures**
  - neurovascular bundles
  - pubo-urethral and puboprostatic ligaments
  - Santorini plexus
  - accessory pudendal arteries

⇨ Standardization in 10 steps

Steps of the „Igloo technique“

1. Exposition of right lateral prostate
2. Incision of endo-/periprostatic fascia
3. Mobilization of right neurovascular bundle
4. Dissection of seminal vesicles and dorsal prostate plane
5. Dissection of bladder neck
6. Mobilization of left neurovascular bundle
7. Mobilization of dorsal venous complex
8. Dissection of the apex
9. Vesico-urethral-anastomosis
10. Closure of endopelvic fascia



Modified from: Dasgupta P., Kirby R.S. (2012). ABC of prostate cancer, ABC series (1st edition). Wiley Blackwell.

Results (n=13)

Median age, yrs	58 (IQR 54-61)
Median prostate size, mL	29 (IQR 21-43)
Median operation time, min	200 (IQR 188-210)
Median preoperative PSA level (ng/mL)	6,8 (IQR 6-8.8)
Preoperative Gleason Score	
6	8 (62%)
7a	3 (23%)
7b	2 (15%)
Prostatectomy T-stage	
T2	11 (85%)
T3a	1 (7,5%)
T3b	1 (7,5%)
Prostaectomy Gleason score	
6	6 (46%)
7a	6 (46%)
7b	1 (8%)
Surgical margins status	
R0	9 (69%)
R1	4 (31%)

IQR: inter quartile range

Results (n=13)

Inontinence rate (pad-test)	
24h after catheter removal	10 (77%)
	Median loss 4g/24h (IQR 2-10g/24h)
10 days postoperative	3 (23%) Loss 10g/24h
>12 weeks postoperative	1 (8%) Loss 10g/24h

Erectile function (IIEF 15 score)	**Median (Range)**
preoperative	65 (IQR 61-65)
>12 weeks postoperative (with/without PDE-5-inhibitors)	48 (IQR 27-59)

IQR: inter quartile range

Conclusion

- Robot assisted RP using Igloo Technique is
  - feasible
  - safe
  - **technically demanding**
- Promising **early continence**
- Moderate erectile dysfunction rates
- To be used only for selected patients
  - no anterior tumors
  - no risk for neurovascular bundle infiltration

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