

Pro: Transanal resection



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Key questions

Accuracy of staging

Completeness of resection

Recurrence

Morbidity

Function

Roadmap

Transanal resection

- Types of surgery

- Video

- Outcomes

Transanal vs. Endoscopic

- Quality of resection

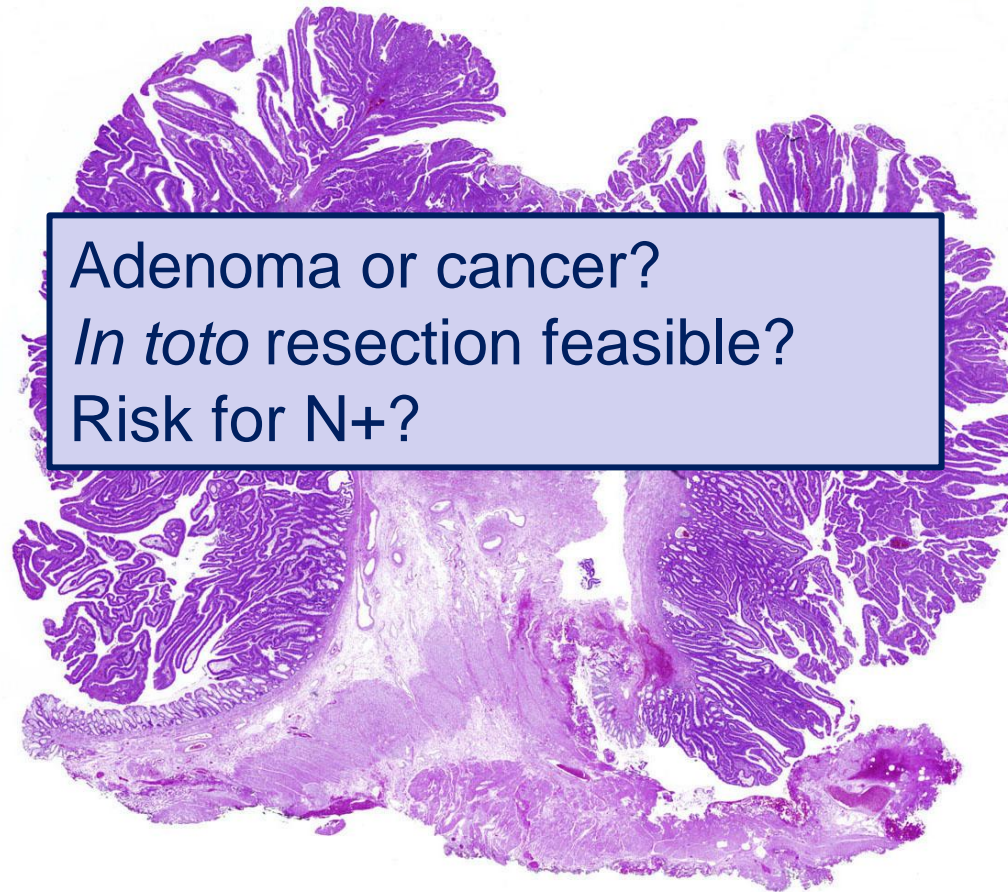
- Morbidity

- Recurrence

♀, 37y, 3cm

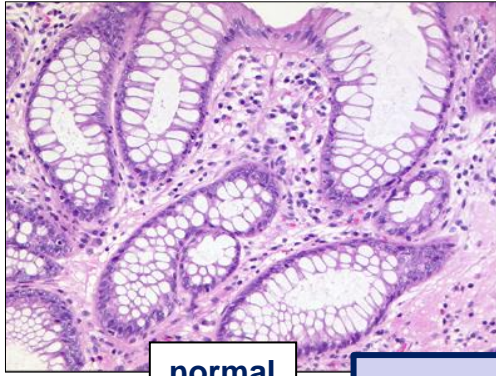


Here is the problem

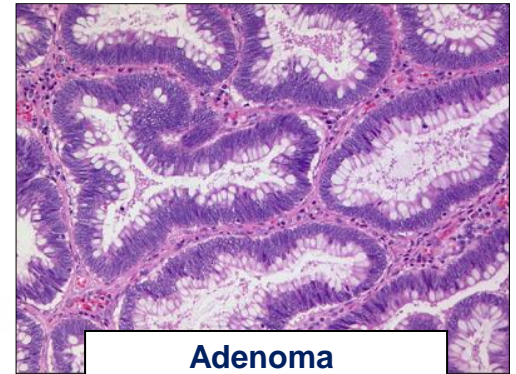


Adenoma or cancer?
In toto resection feasible?
Risk for N+?

Final diagnosis

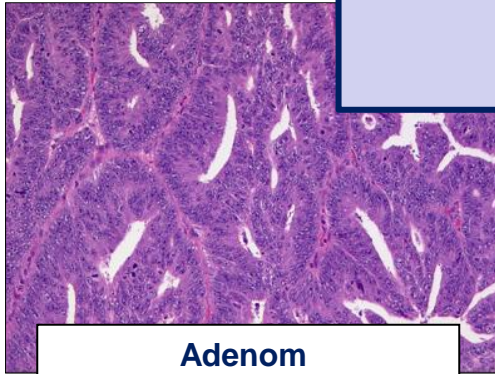


normal

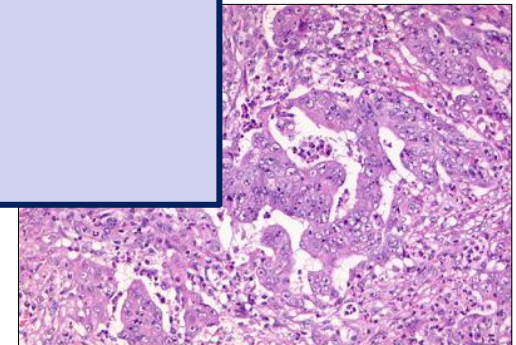


Adenoma
Low-grade Dysplasia

Does this young lady need:
Nothing (cured)?
Follow-up?
Local re-resection?
Radiation?
Radical surgery?

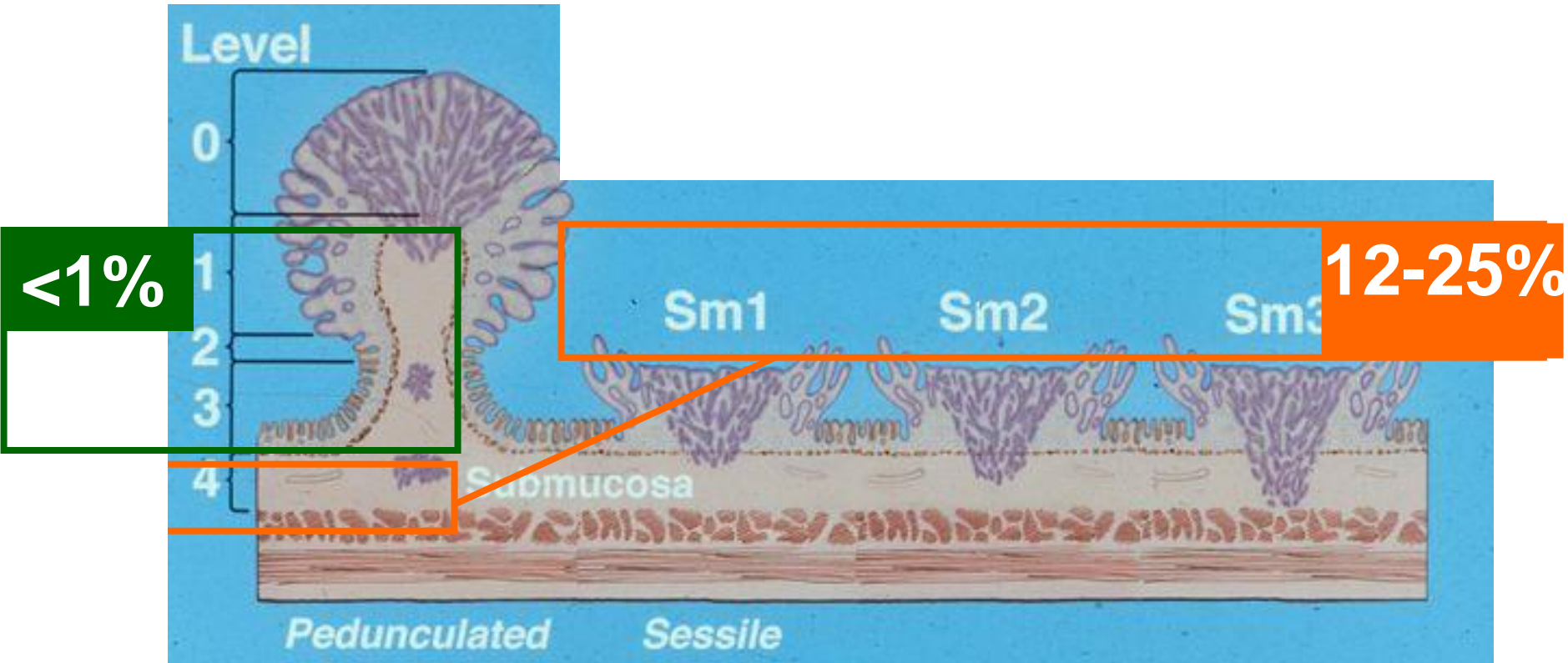


Adenom
High-grade dysplasia



invasiv adenocarcinoma

Risk for N+



Haggitt RC . *Gastroenterology* 1985
Nivatvongs S. *DCR* 1991
Coverlizza S. *Cancer* 1989

Kyzer *Cancer* 1992
Cooper HS. *Gastroenterology* 1995

Submucosal invasion depth



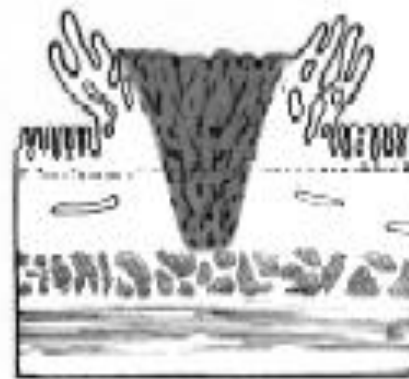
Sm1

8%



Sm2

11%



Sm3

34%

Aims

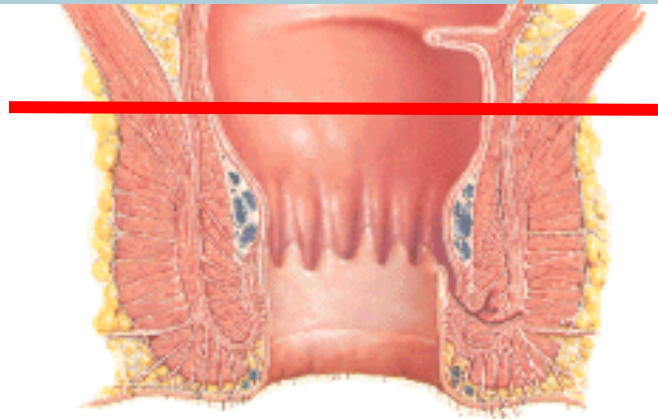
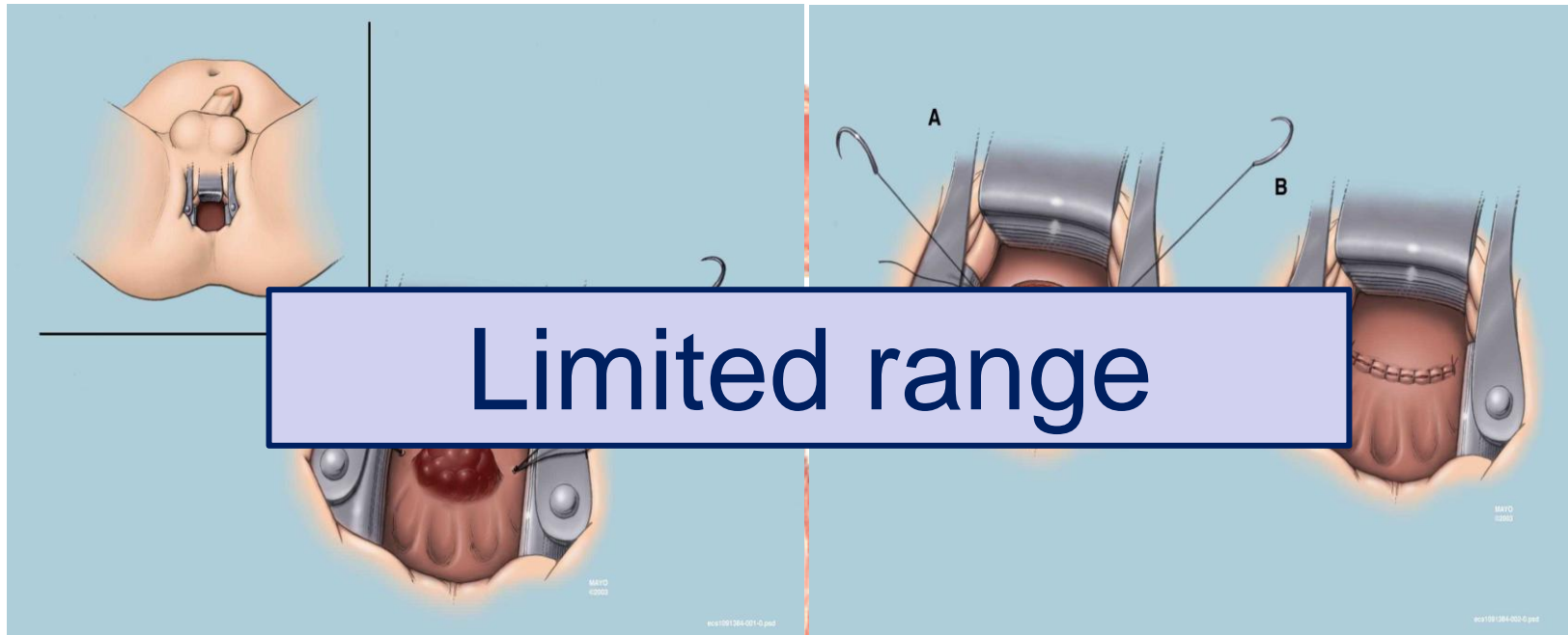
Complete resection

En-bloc, orientated

Minimal morbidity

Good function

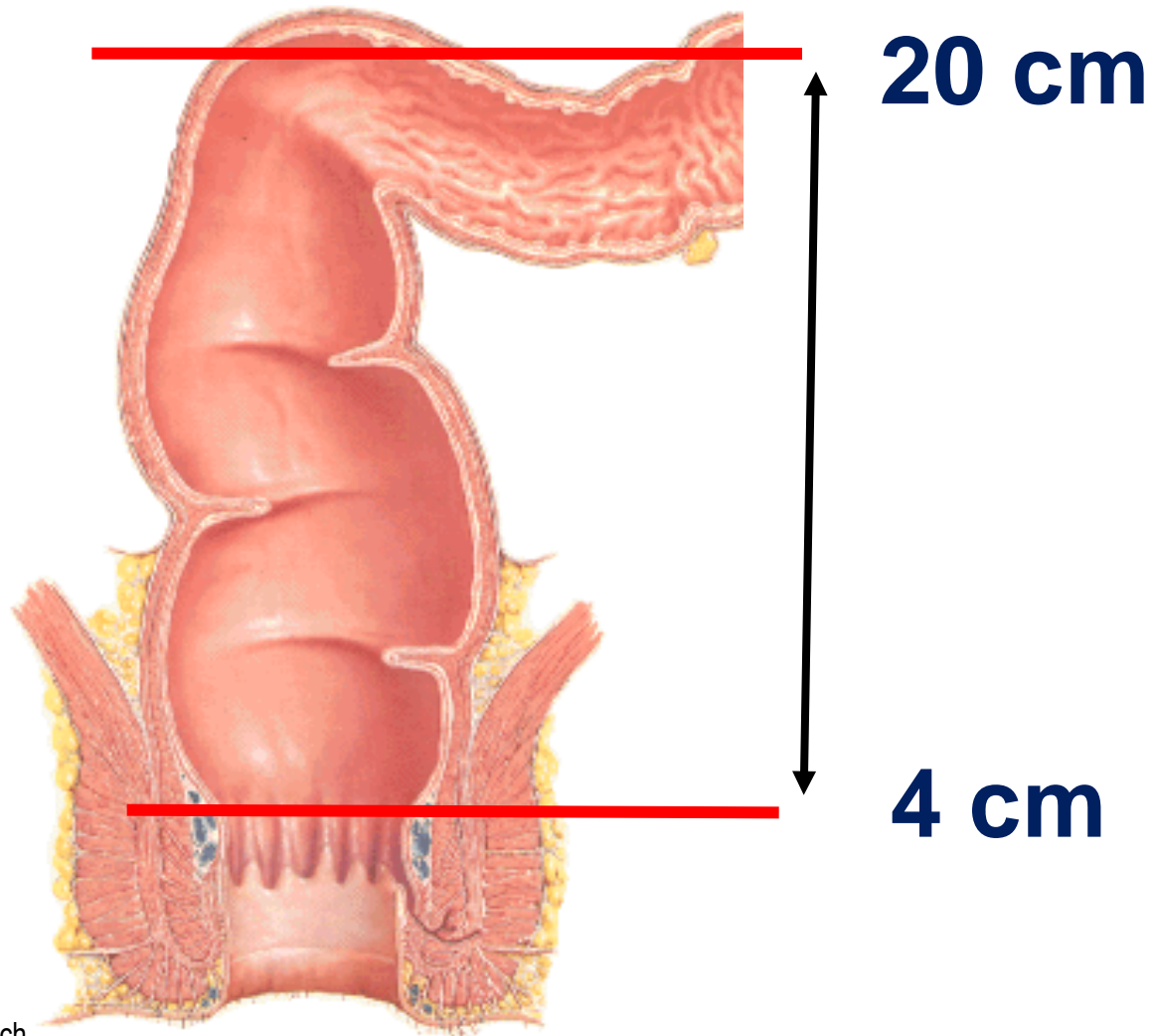
Transanal resection



6 cm

Courtesy Prof. D. Hahnloser

Transanal endoscopic resection



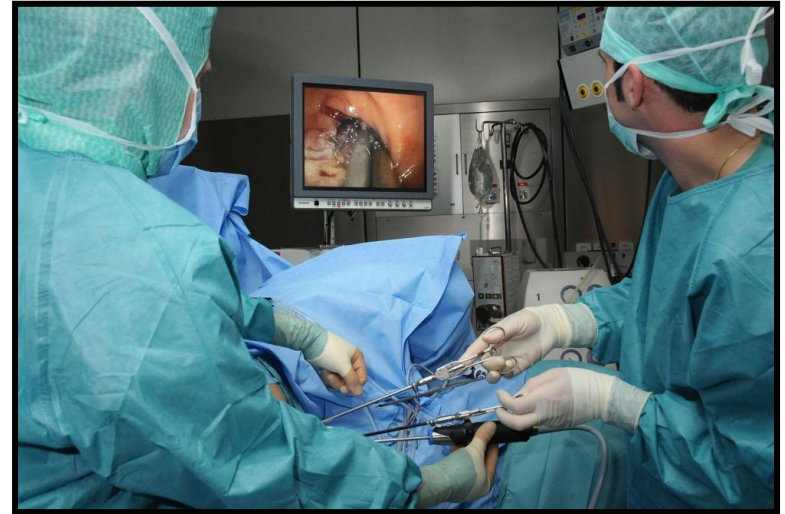
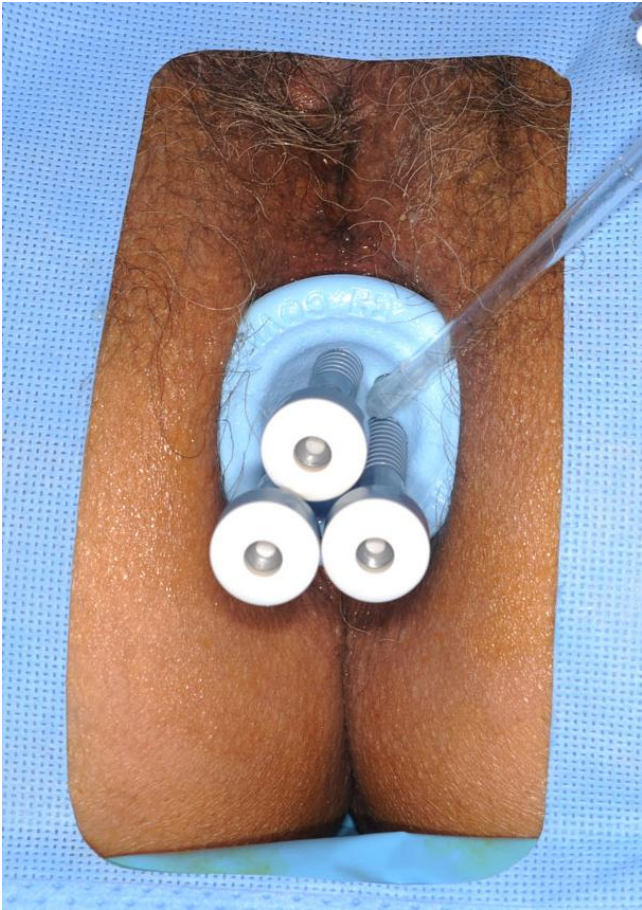
Transanal Endoscopic Microsurgery



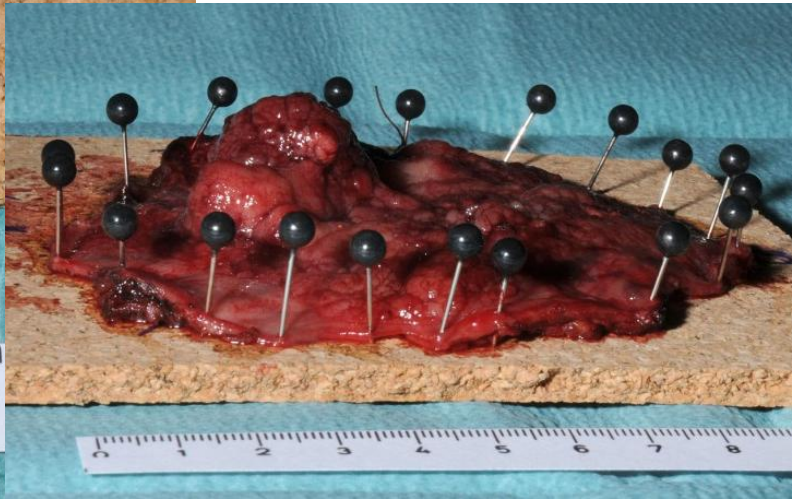
Difficult
Expensive
Limited availability



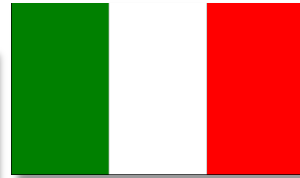
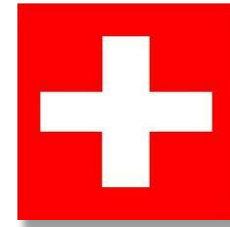
Transanal Minimal-Invasive Surgery



Courtesy Prof. D. Hahnloser



TAMIS: results



n=75 consecutive patients, 4 centers
7% previous anal surgery

All attempts successful

93% in lithotomy

77 minutes (25-245)

7 intra-OP complications (9%)

Bleeding 3x, Peritoneal opening 3x, Pneumoscrotum

Hahnloser D. Colorectal Dis 2015

TAMIS: post-OP morbidity

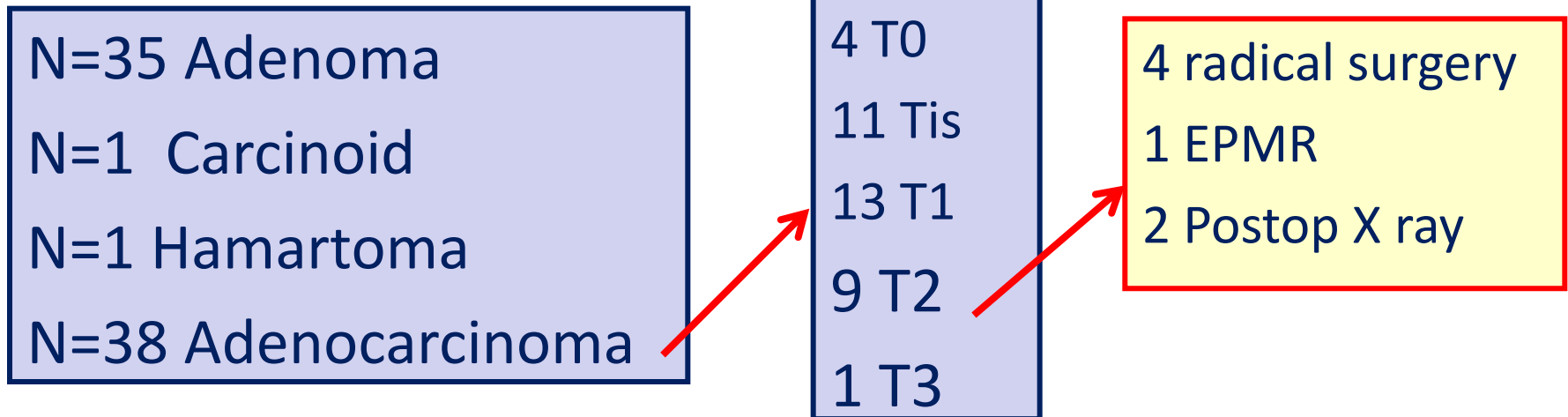
	N= (%)	Grade
Bleeding	5 (7%)	2 grade I, 3 grade II
Local Infection	6 (8%)	5 grade II, 1 grade IIIb
Urinary tract infection	2 (3%)	2 grade II
Urinary retention	2 (3%)	2 Grade II

15 (20%)

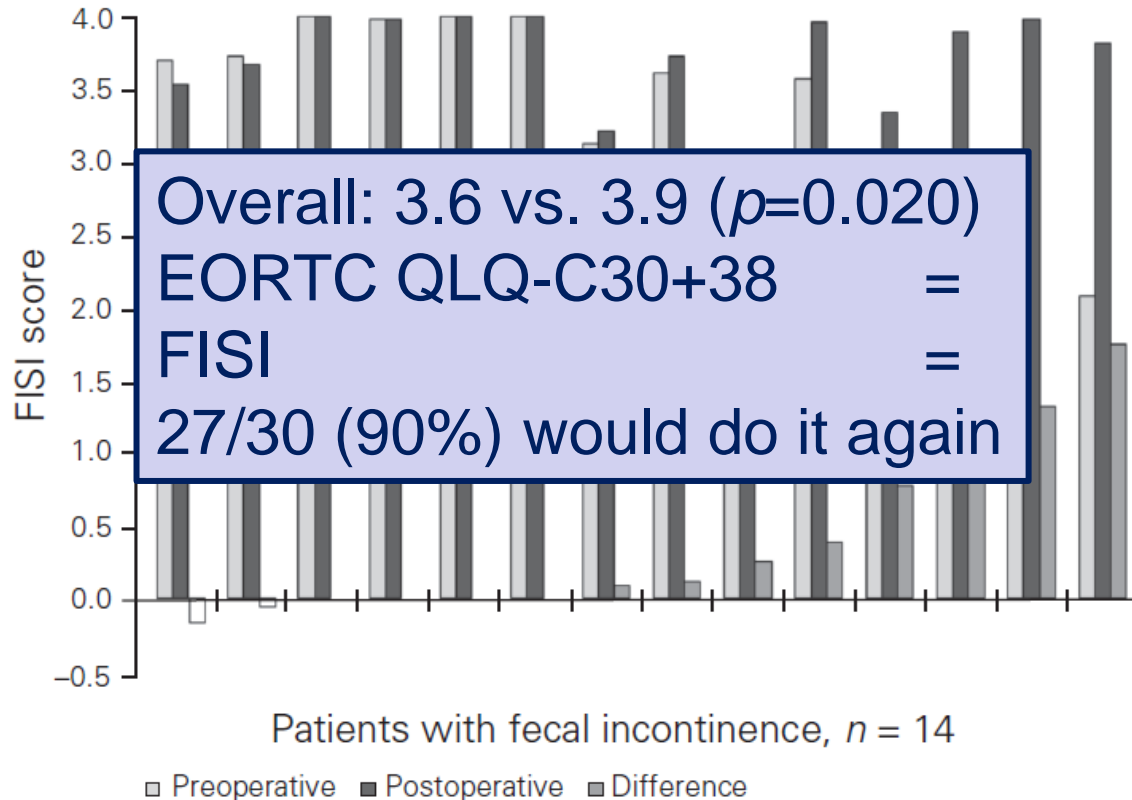
**LOS 3.4 days
(range 1-21)**

TAMIS: specimen quality

- Size: 39x29x13mm
- Fragmentation 8% (all benign)
- Mean resection margin 7.9mm
- Lymph nodes 17% (1.6 mean)



Postoperative function



Repeated TEM?

	<i>First TEM (n=14)</i>		<i>Repeated TEM (n=14)</i>
Length of stay (days) [mean (SD)]	1.7±1.3		1.7±1.1
Overall morbidity [<i>n</i> (%)]	5 (35.7)		3 (21.4)
Respiratory complication [<i>n</i> (%)]	2 (14.3)		1 (7.1)
Urinary tract infection	0	=	0
Urinary retention [<i>n</i> (%)]	2 (14.3)		1 (7.1)
Bleeding [<i>n</i> (%)]	0		1 (7.1)
Pelvic sepsis (abscess, infected hematoma)	0		0

Khoury J Lap.endosc & Adv Surg Tech 2013

Systematic review and meta-analysis of endoscopic submucosal dissection versus transanal endoscopic microsurgery for large noninvasive rectal lesions

	ESD 11 studies N=536	TEM 10 studies N=1'541	P
En bloc	88% (95%CI: 84-91)	99% (95%CI: 97-99)	.001
R0	75 (70-78)	89 (86-91)	.001
Complications	8 (5-12)	8 (5-13)	.874
Recurrence	2.6 (1.3-5.2)	5.2 (4-6.9)	.001

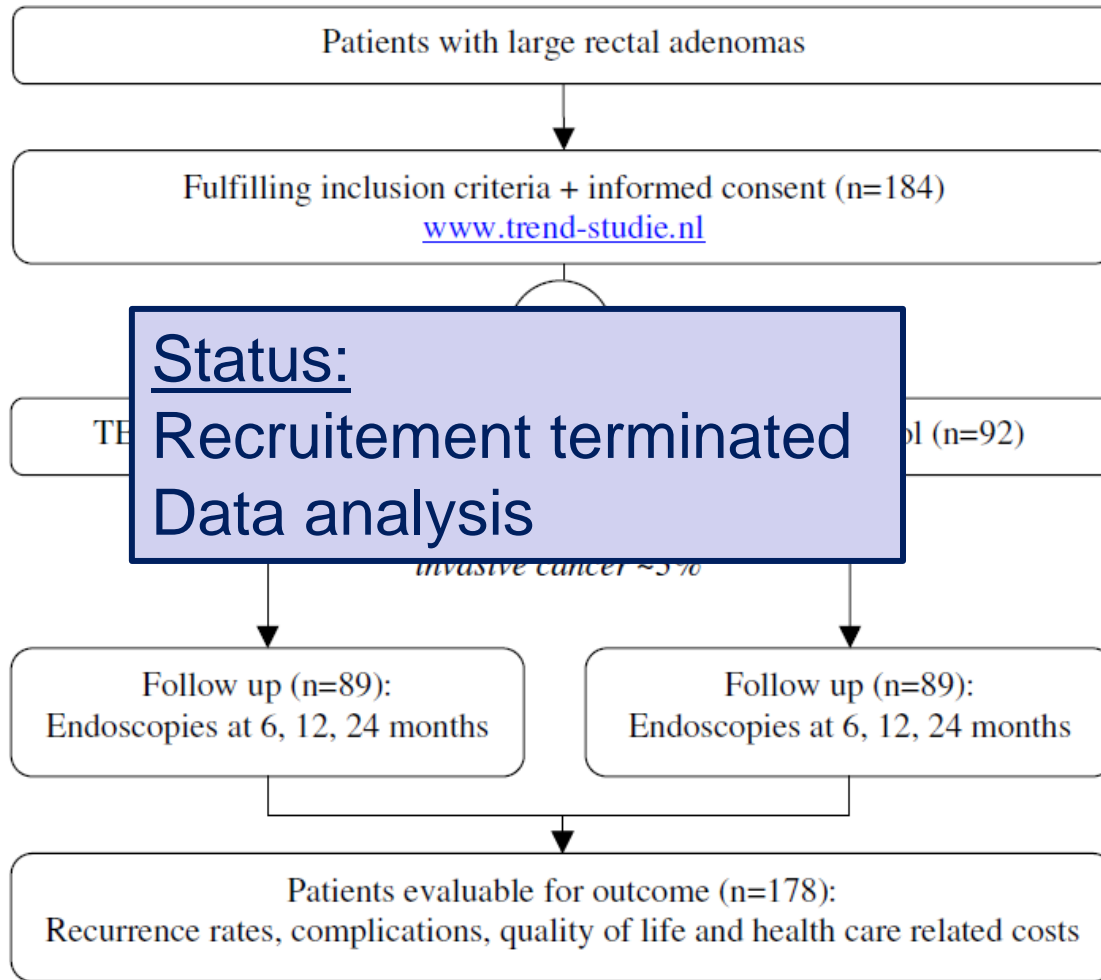
Arezzo Surg Endoscopy 2014

Systematic review of endoscopic mucosal resection versus transanal endoscopic microsurgery for large rectal adenomas

	ESD 20 studies N=1'030	TEM 48 studies N=2'860	P
Polyp size	31mm (range: 2-86)	37mm (range: 3-182)	.02
Recurrence early	11% (6-20)	5% (4-7)	.04
late	1.5 (0.6-3.9)	3 (1.3-6.9)	.29
Complications	3.8 (2.8-5.3)	13 (9.8-17)	.001

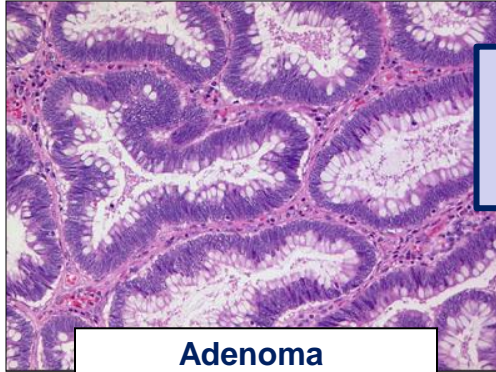
Barendse Endoscopy 2011

TREND study

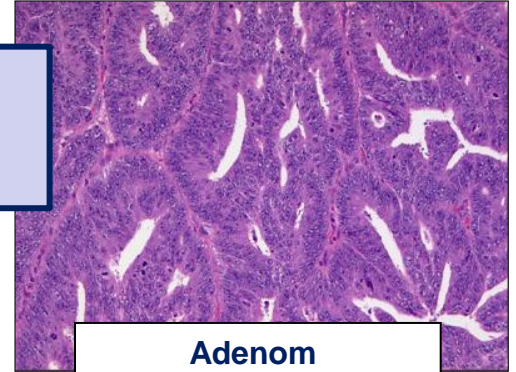


... and our patient?

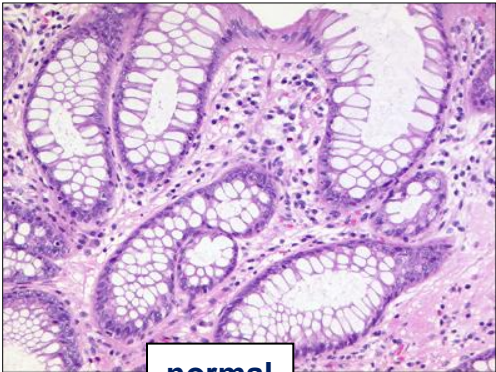
... is cured!



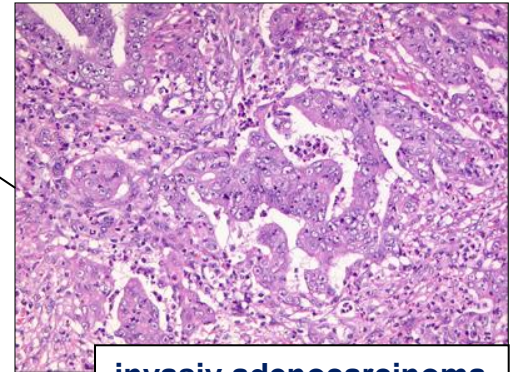
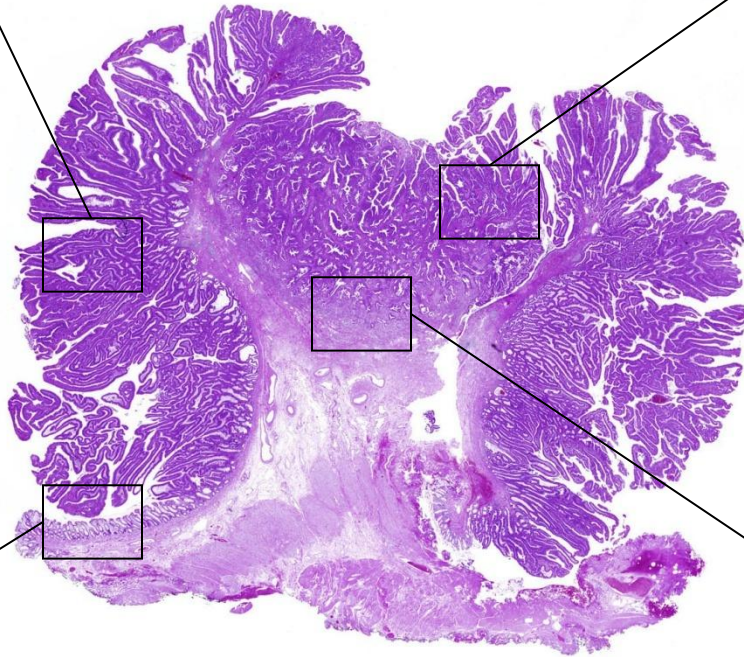
Adenoma
Low-grade Dysplasia



Adenom
High-grade dysplasia



normal



invasiv adenocarcinoma

Conclusion

Complete resection	Transanal > Endoscopic
En-bloc, orientated	Transanal > Endoscopic
Minimal morbidity	Transanal = Endoscopic
Good function	Transanal = Endoscopic