

Vancouver Rectal Cancer Course

UBC Rectal Cancer Update:

The Last 5 cm – Distal TME and Beyond

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Intersphincteric Resection for Very Low Rectal Adenocarcinoma

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Backgrounds

- **APR is a standard treatment for very low rectal cancer (VLRC) below 5 cm from the anal verge.**
- **ISR has expanded an indication of sphincter preservation for VLRC**

Intersphincteric Resection (ISR)

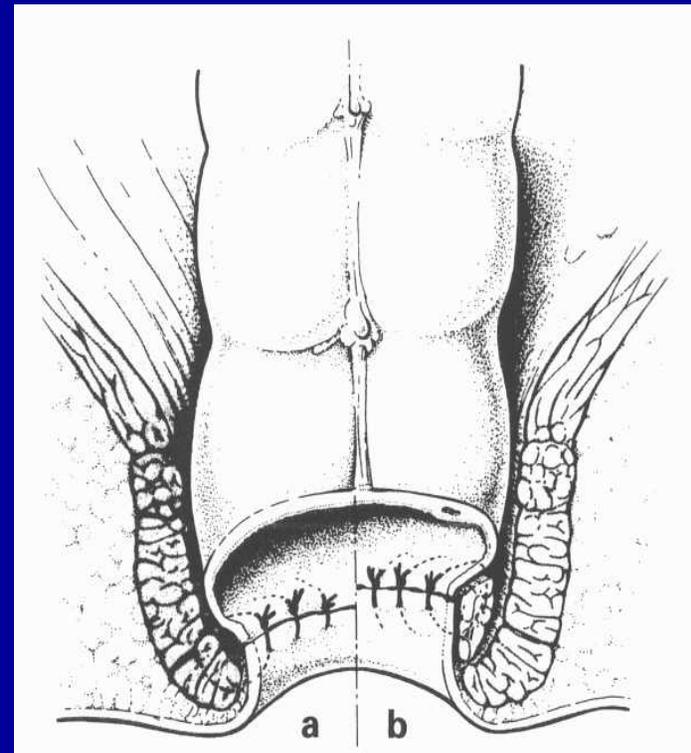
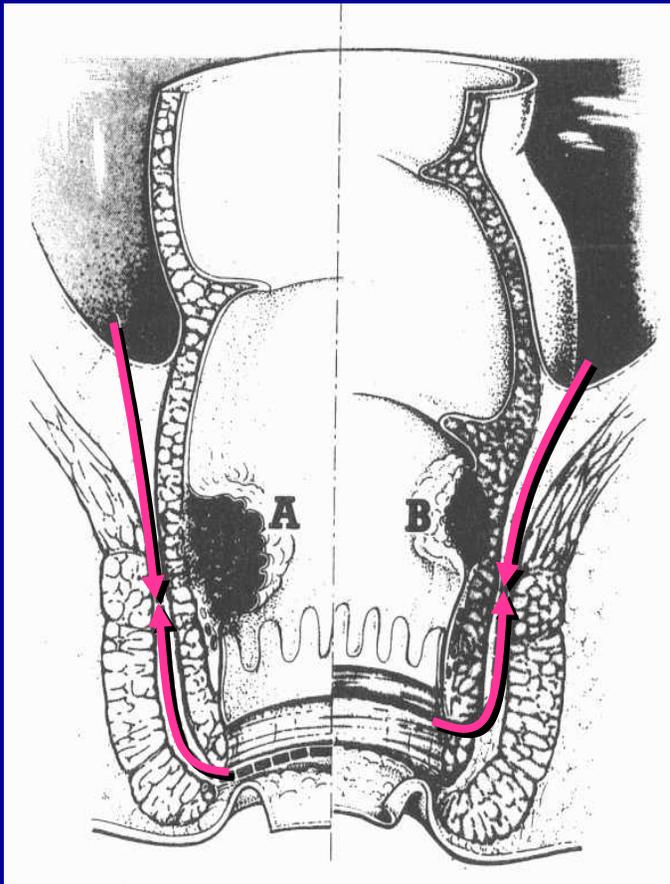
Basso

1987 DCR

Kusunoki & Utsunomiya 1992 Surgery

Schiessel

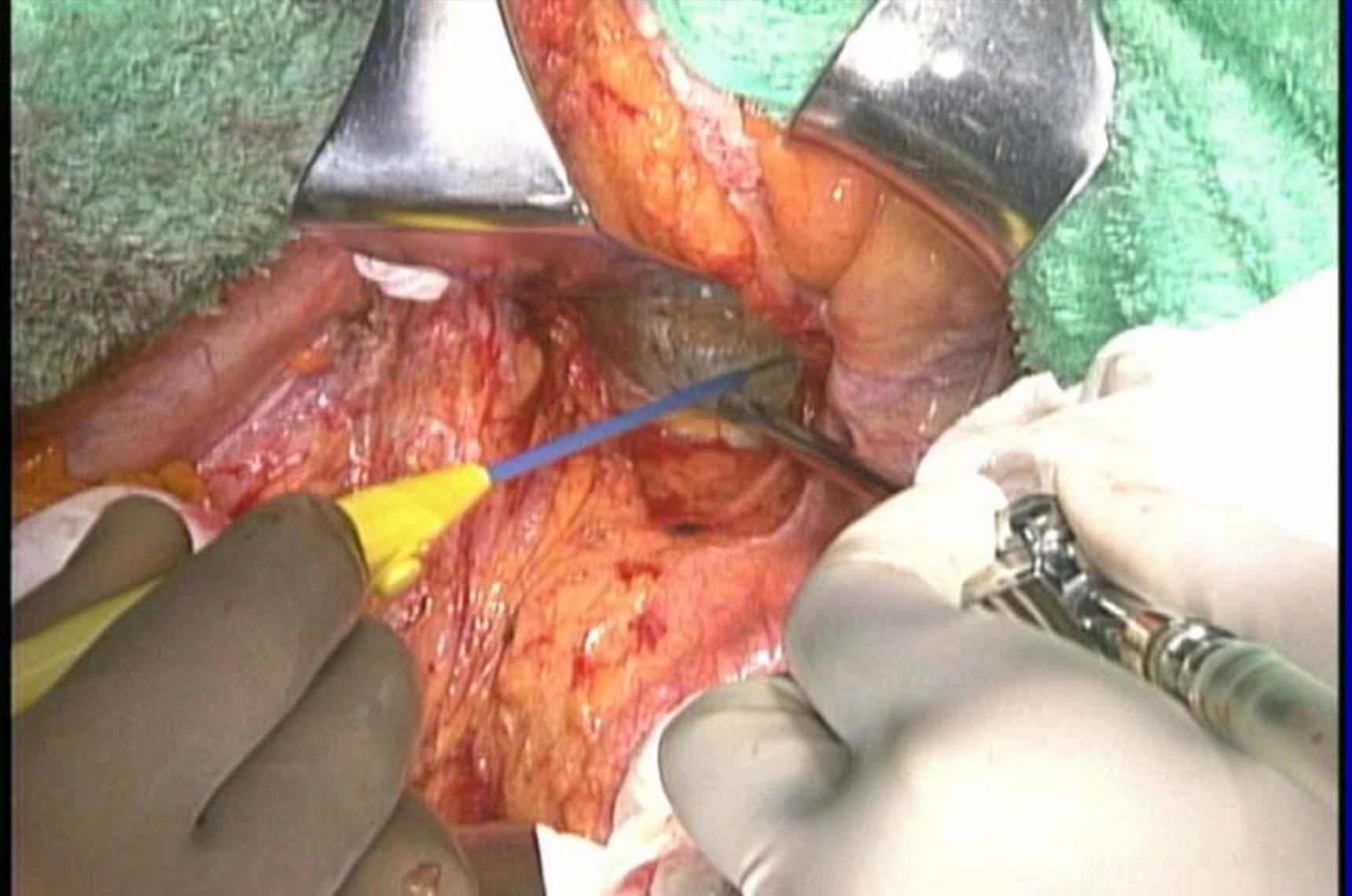
1994 BJS



Indication

- **Sufficient medical fitness**
- **Normal sphincter function**
- **Distance between tumor and anorectal junction < 1-2 cm**
- **No involvement of external sphincter**
- **No signs of disseminated disease**

Methods of ISR



Technical Tips

- **Meticulous dissection under direct vision by electrocautery**
- **Distal resection margin of at least 1 cm**
- **Sufficient irrigation after closure of rectal stump**

Purpose

- **To review short-term and long-term results after ISR for VLRC**

Patients

- 122 pts undergoing ISR (1993–2007)
- 2 pts with radiotherapy
- **120 pts without radiotherapy**
 - Men 92
 - Women 28
- Age
 - Median 57 (26–75) years
- Distance from anal verge
 - Median 3 (1–5) cm

Treatment

- **Internal sphincter resection**
 - Partial 103
 - Complete 17
- **External sphincter resection**
 - No 108
 - Partial 12
- **Lymphadenectomy**
 - TME 74
 - TME + ELD 46
- **Pouch**
 - No 58
 - J-pouch 24
 - TCP 38
- **Covering stoma**
 - Yes 108
 - No 12
- **Adjuvant Chemo**
 - No 93
 - Yes 27

Short-Term Results

- Median operating time 339 min
- Median blood loss 462 ml
- Mortality 1 (0.8%)
- Morbidity 39 (33%)
 - Conservative tx 30 (25%)
 - Operated 9 (8%)
- Permanent stoma
 - No 113 (93%)
 - Yes 7 (7%)
- Median hospital stay 15 days

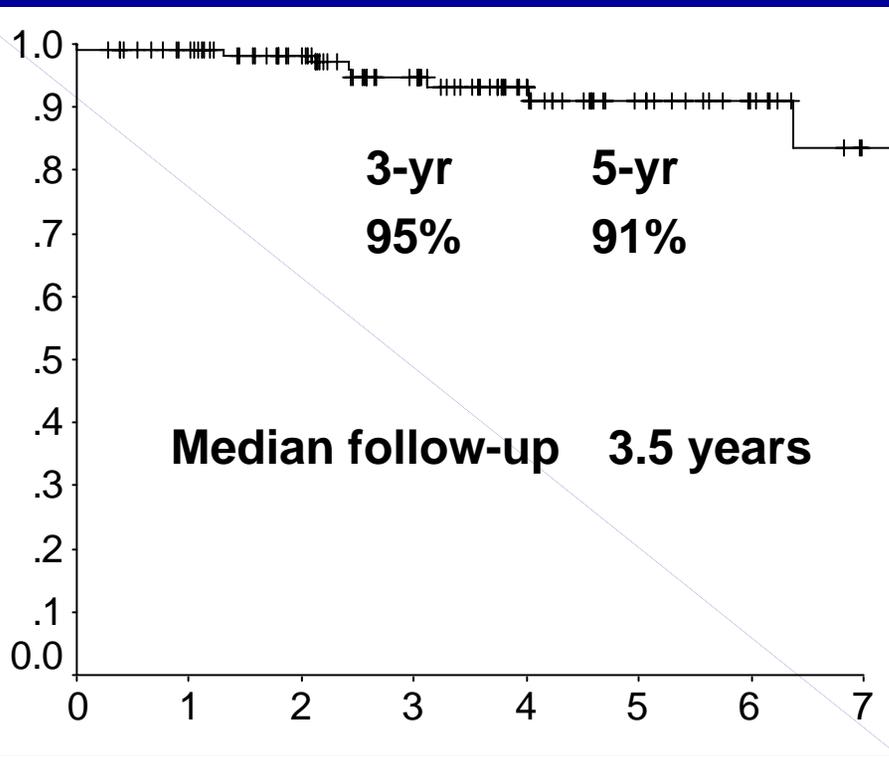
Pathologic findings

- Tumor size
 - Median 3.7 (1–12) cm
- Histologic grade
 - Well 59
 - Moderate 53
 - Poorly 8
- Resection margins
 - R0 116
 - R1 4
- pT
 - pT1 25
 - pT2 46
 - pT3 49
- TNM-Stage
 - I 50
 - II 21
 - III 46
 - IV 3

Complications

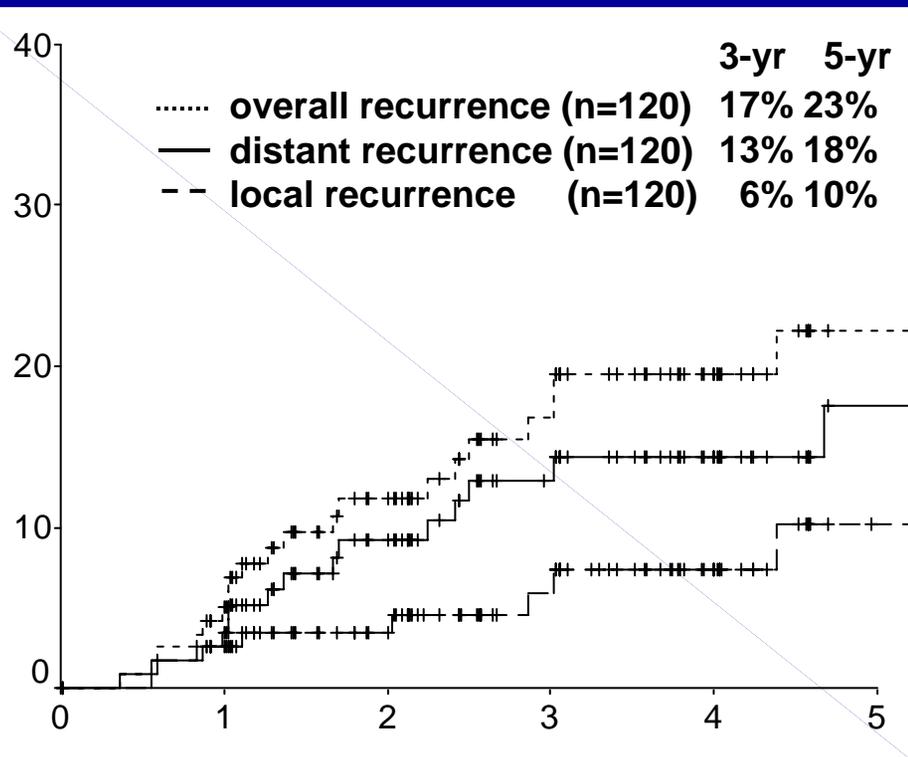
- **Anastomotic leakage** 15 (13%)
 - conservative treatment 9 (9%)
 - operated 6 (6%)
 - permanent stoma 5
- **Bowel obstruction** 6 (7%)
 - conservative treatment 5 (5%)
 - operated 1 (2%)
- **Wound infection** 9 (8%)
 - conservative treatment 9 (8%)

Overall Survival



Time after ISR (years)

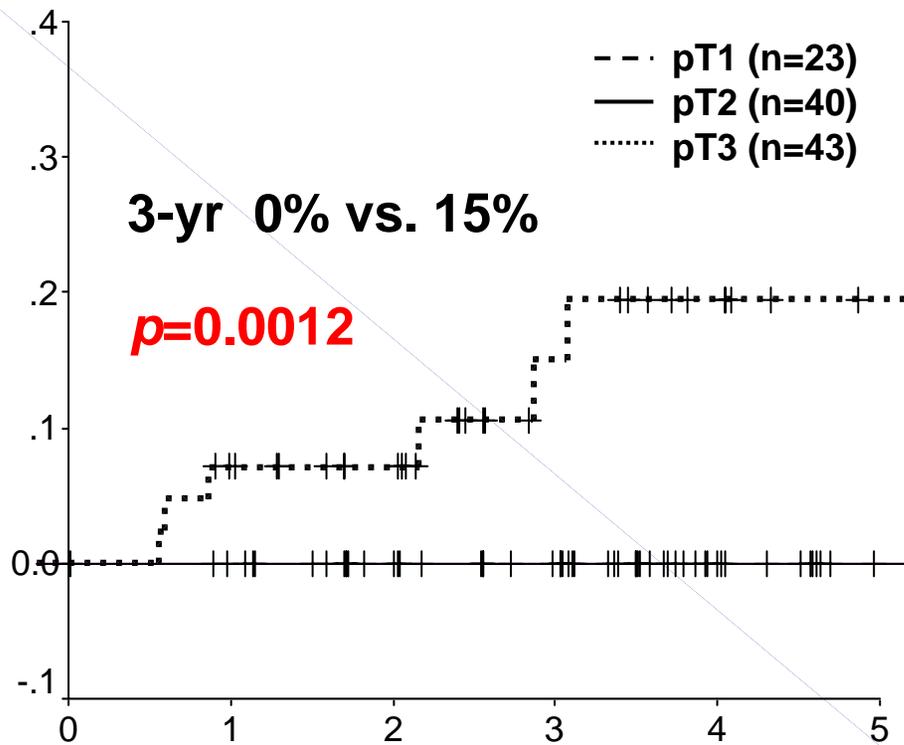
Recurrence



Time after ISR (years)

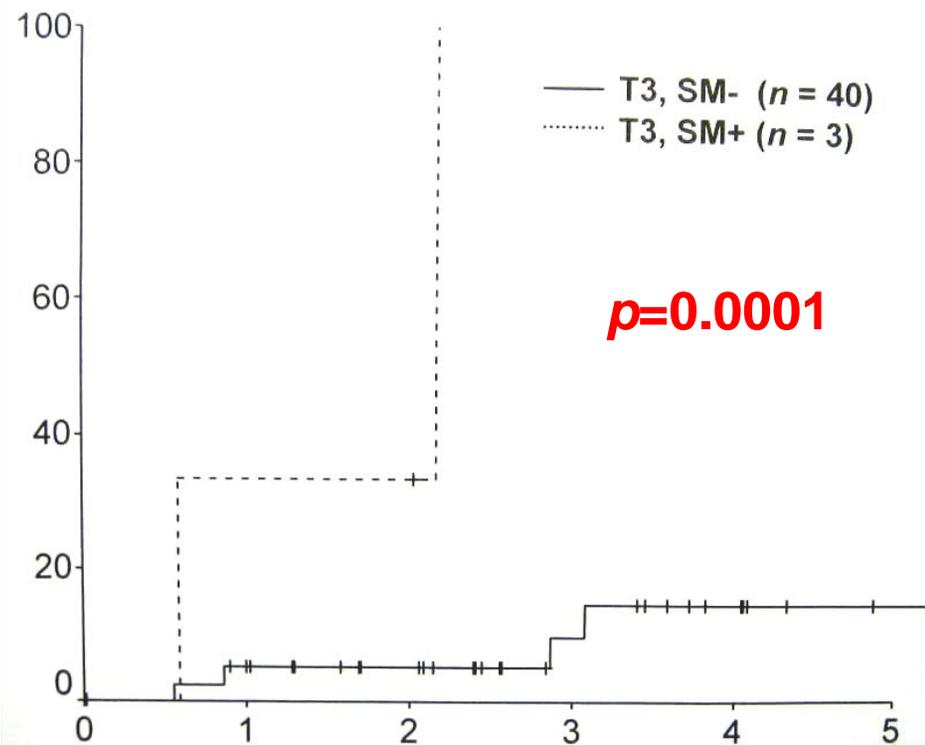
Risk Factors for Local Recurrence

T-stage



Time after ISR (years)

Surgical margins



Time after ISR (years)

Conclusion

- **If we stick to the meticulous procedures shown in video, ISR is safe in the short term and long term**
- **With T1 and T2 tumors, if meticulous dissection and irrigation are performed, local control is assured and radiotherapy is not necessary**
- **For T3 tumors, if resection margins are estimated to be insufficient, preoperative therapy should be considered to reduce the risk of local failure**