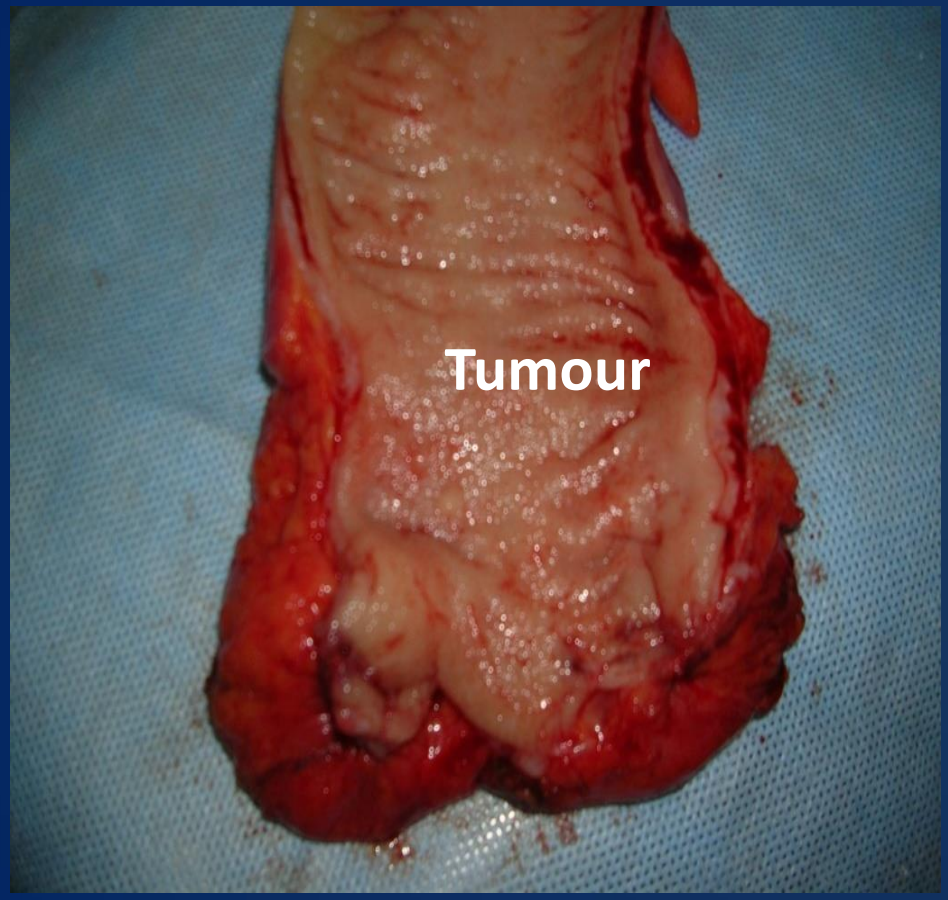
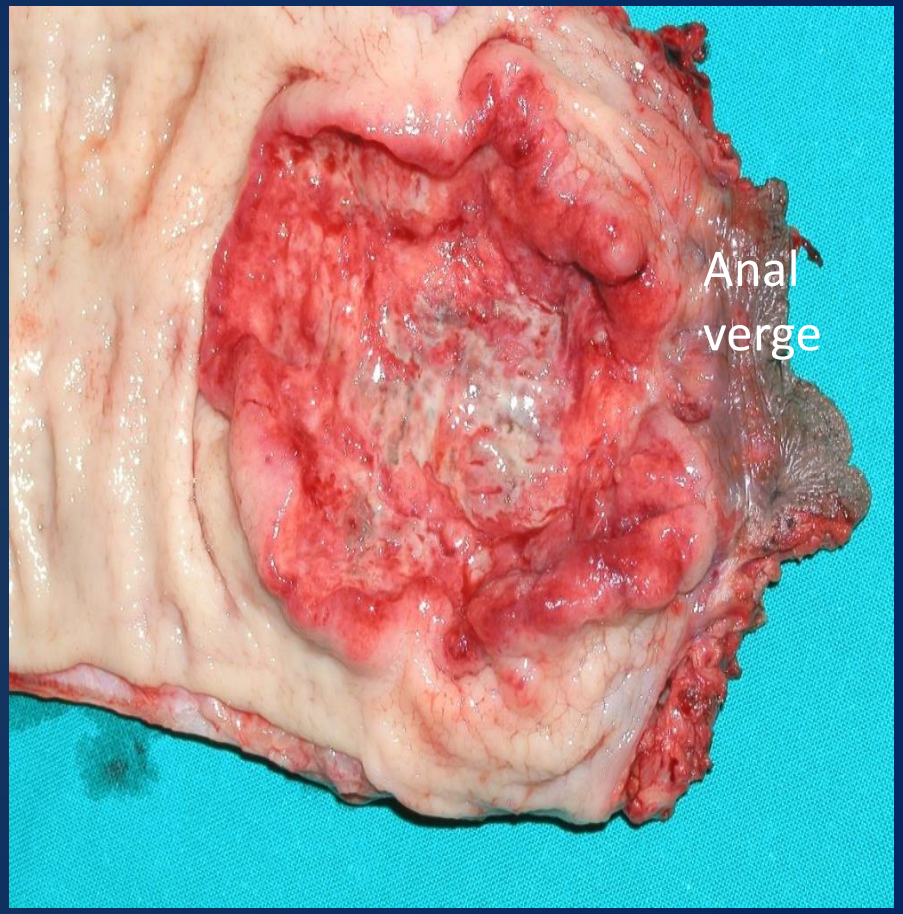
Resected Specimens



Complete tumour regression after neo-adjuvant chemoradiation



Partial tumour regression after neo-adjuvant chemoradiation

A Modified Perineal Approach For Intersphincteric Resection With Preservation of Continence For Distal Rectal Cancer.

Medhat Khafagy M.D
Wael M.S.A.Gawad M.D-FRCS

Department of Surgical Oncology-
National Cancer Institute
Cairo University
Egypt

Rationale

- This technique aims at preservation of continence through:

.Preservation of neural arc for defecation

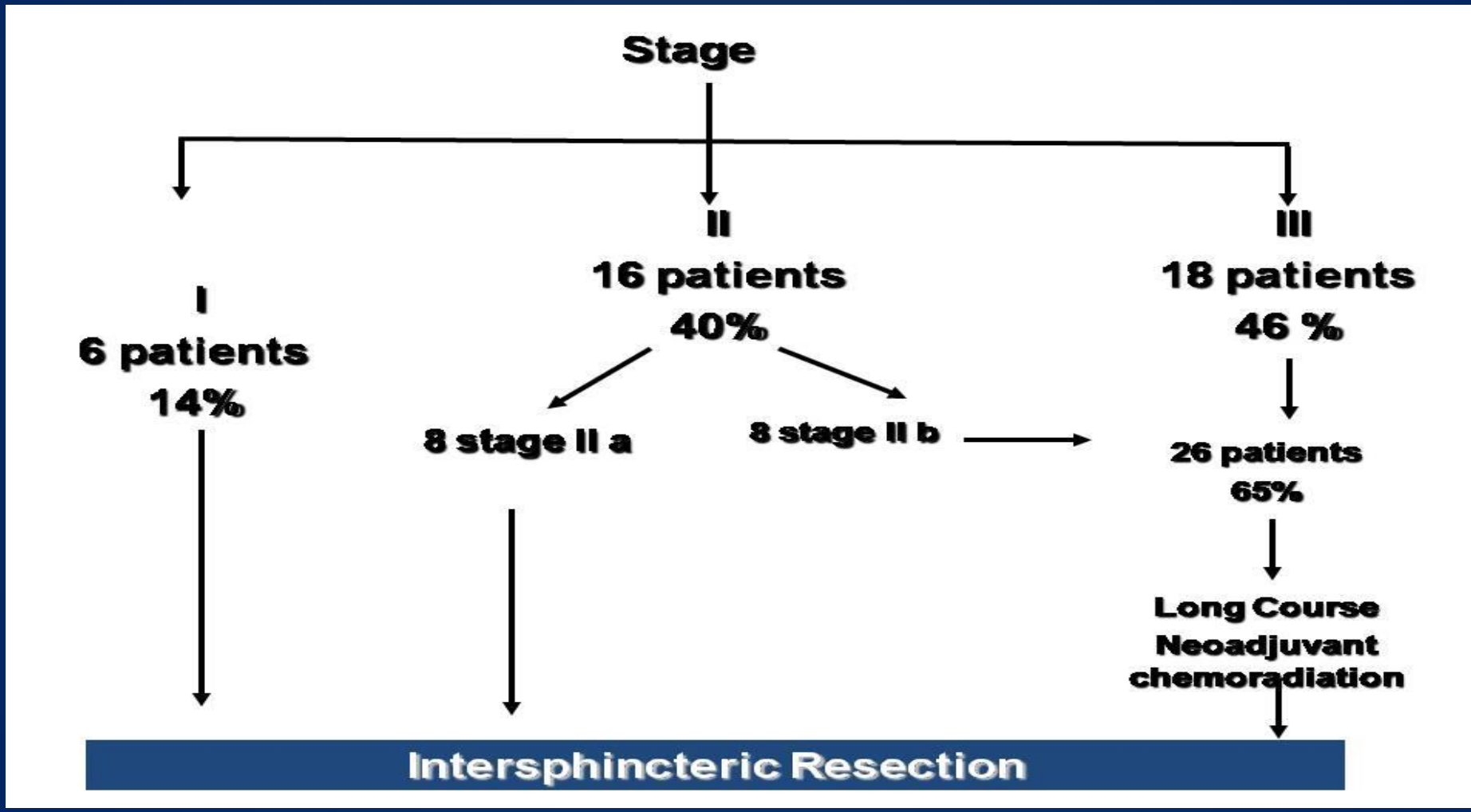
→ Subtotal anal canal resection.

.Preservation of motor sling(motor effectors) → Levator ani-External &part of internal sphincter.

Study Design

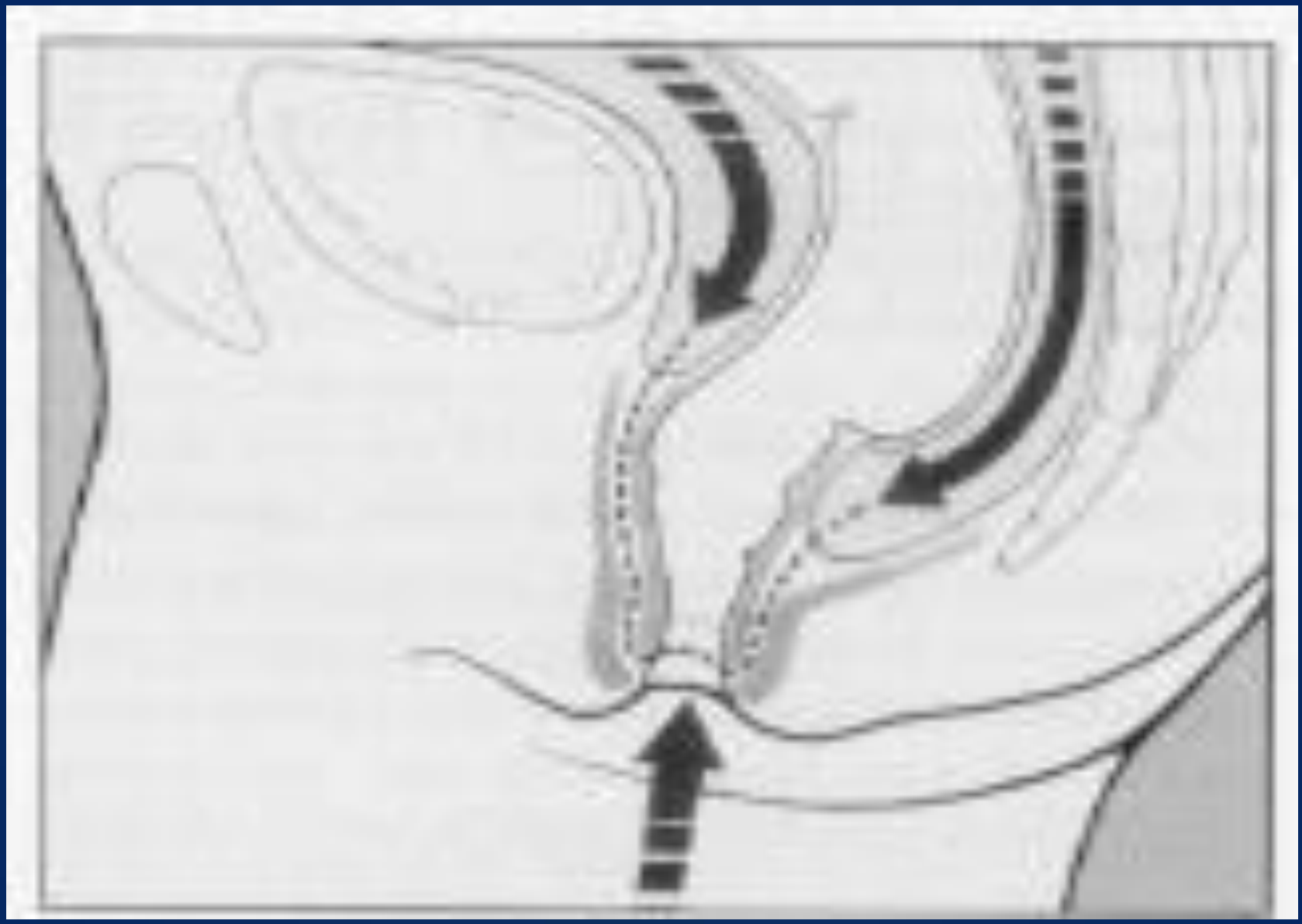
- Between January 2008 to June 2016, Fifty patients were prospectively enrolled in the study.
- All patients had an infiltrating adenocarcinoma 5cm or less from the anal verge.
- Staging of the disease by MRI.

Tumour stages & Management.

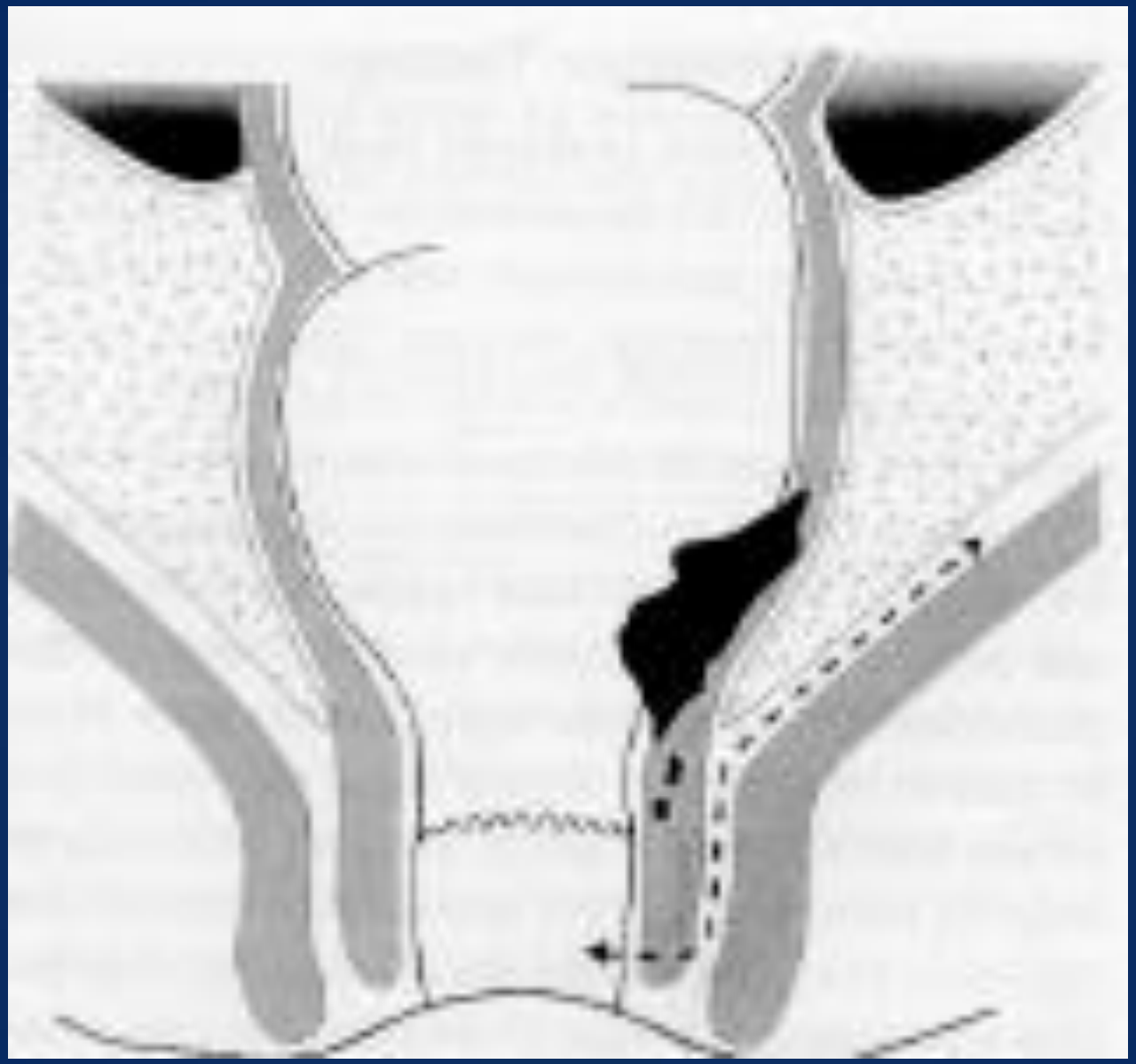


Surgical Technique

- Abdominal Phase
- Lloyd Davis Position
- Ligation of I.M pedicle
- Selective pelvic autonomic nerve preservation (PANP) &Lateral pelvic node dissection.
- Preservation of nerves to levator ani muscles.
- Temporary protective ileostomy.



Intersphincteric resection is performed by the abdominal route and per anum.

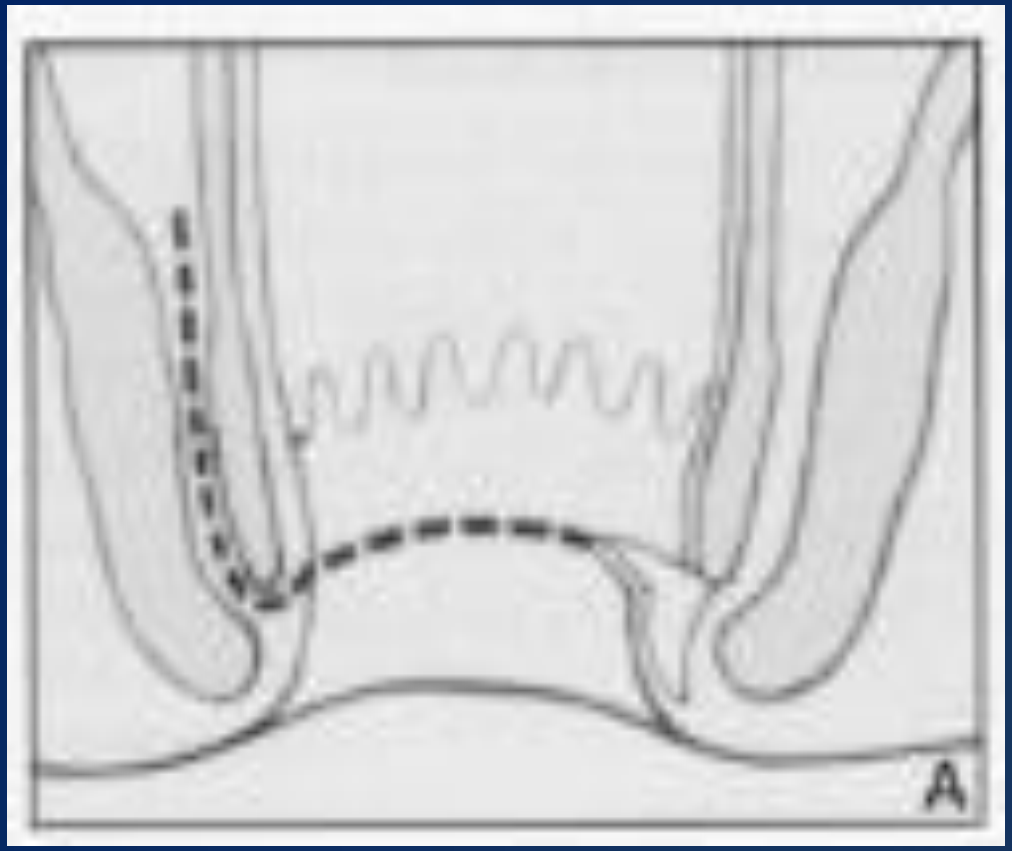


Intershincteric resection with subtotal excision of the internal anal sphincter for a tumor located at the anorectal junction.

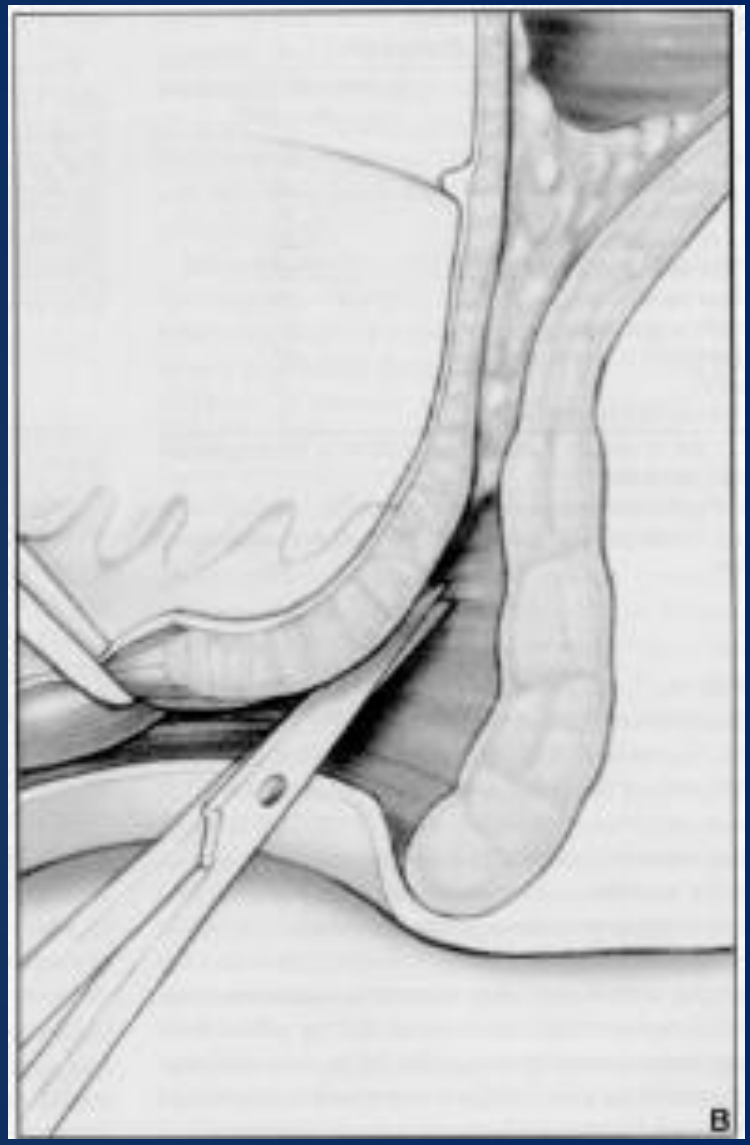
Anal Phase

- Circumferential perianal skin incision below tumour site.

- Ipsilateral anal intersphincteric dissection with levator sling preservation.



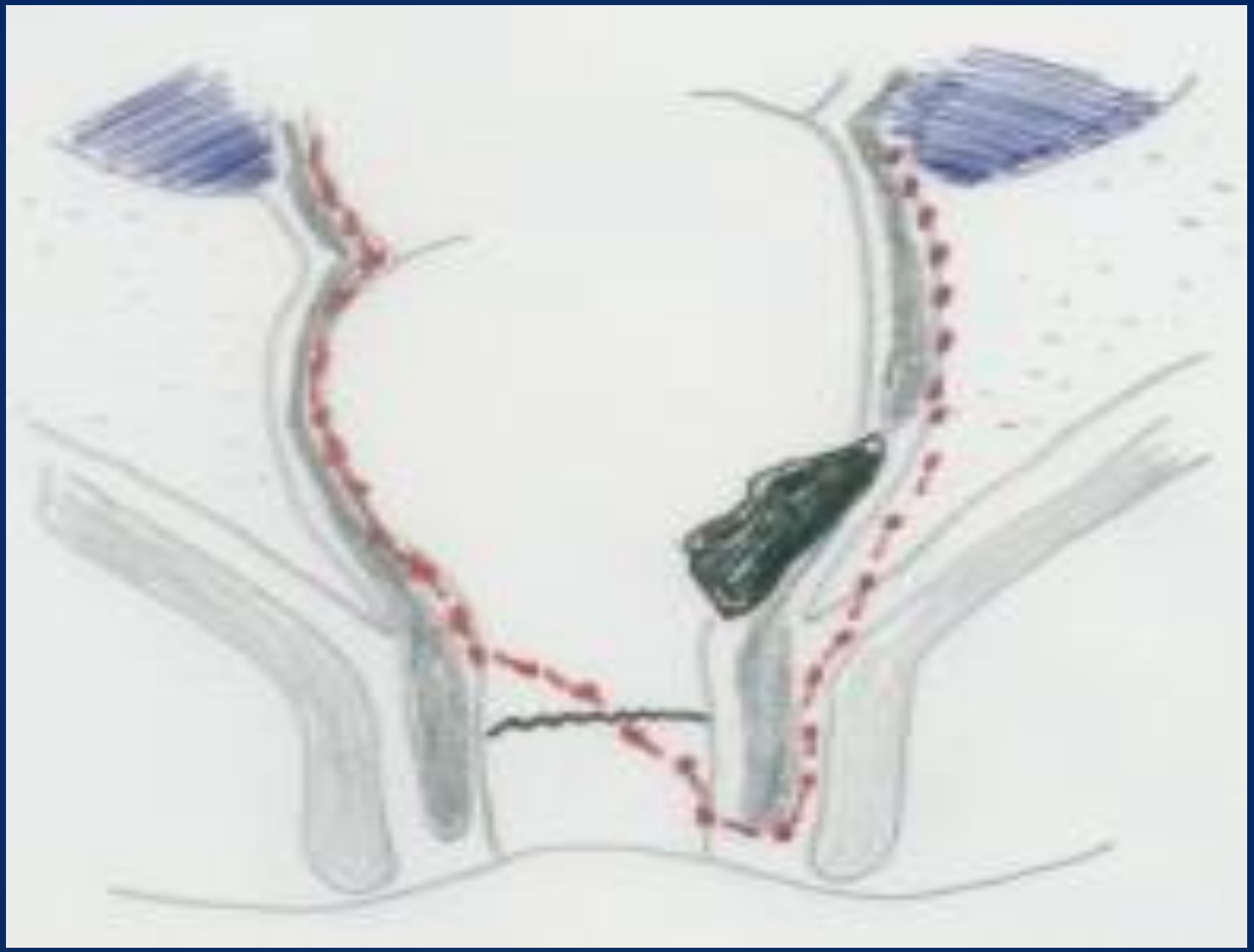
A. The anal portion begins with incision of the anoderm and identification of the internal sphincter.



B. The intersphincteric space is entered, and the internal sphincter is dissected circumferentially.

Tumour resection

- Vertical subtotal anal canal resection with 2cm distal safety margin and 2cm at either side.
- Preservation of at least 1 cm of the anal canal above the dentate line.
- Down mobilization and resection of the rectum and sigmoid colon at mid sigmoid.



Extent of the Resected tumour → Dashed Line

L : Levator Ani T : Tumour

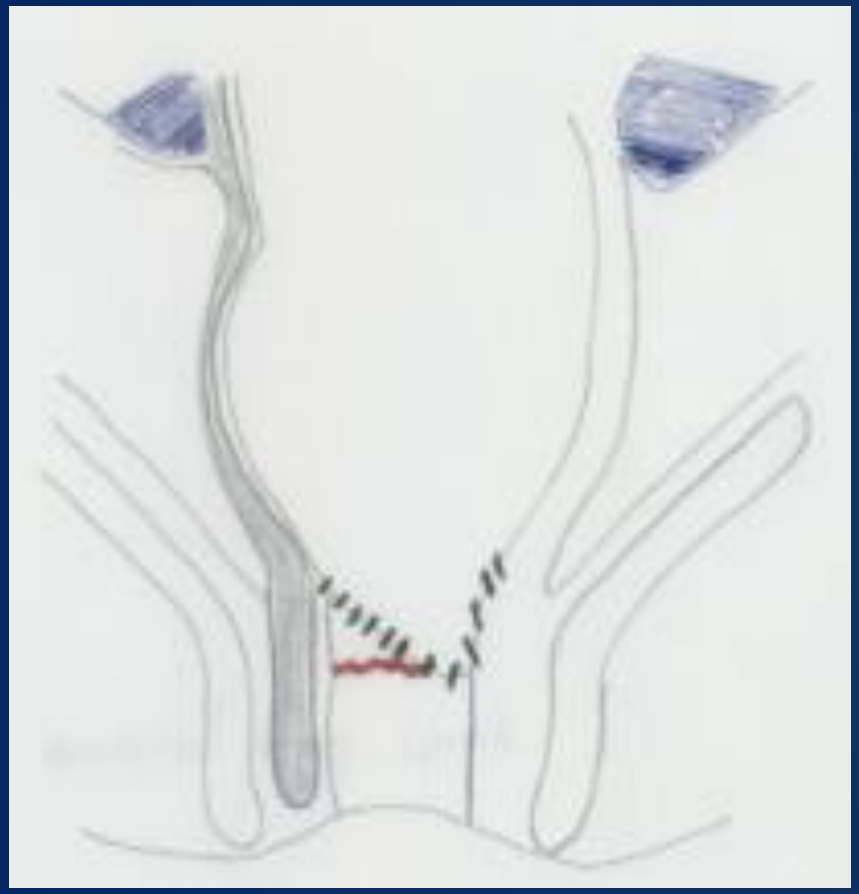
E : External Sphincter I : Internal Sphincter

D : Dentate Line

Reconstruction

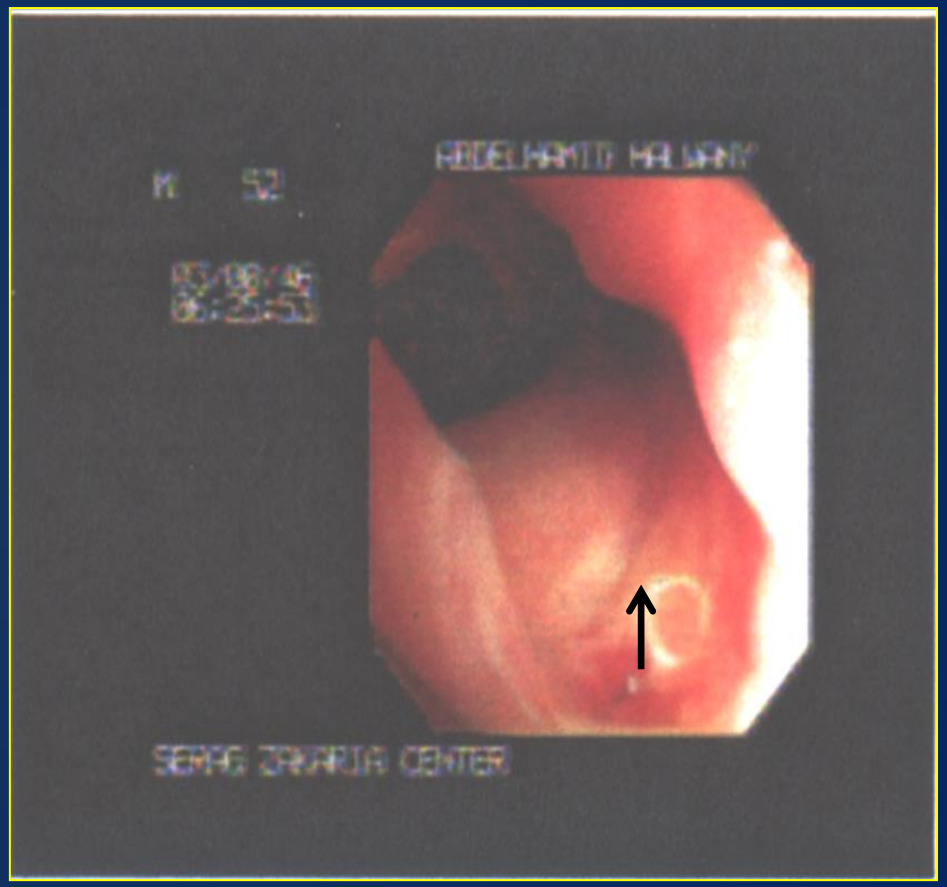
- Augmentation of the levator sling and narrowing of the anal hiatus with 3 sutures of 0/P.D.S 1.
- Colo-anal anastomosis: Mid sigmoid with remaining anal canal (Modified park's technique).

Reconstruction



Dashed Line : Anastomotic Site

Anastomosis of the colon with remaining anal stump



Colonoscopy 3 months later.

Results

- Male: Female ratio was 1.8:1. Tumors were located between 2.5 -4.5 (mean 3.6) cm from the anal verge

Results

Surgical Mortality & Morbidity

Diagnosis	number	Percentage%	Treatment
Sepicaemia (died)	1	2.5 %	
Pul. Embolism	1	2.5 %	Anticoagulants
Anastomotic Dehiscence	1	2.5 %	Conservative
Pelvic sepsis	1	2.5 %	Drainage

Pathological Results

Stage		Distal Margin mean	Redial clearance mean
B	C		
41 %	59 %	3.6 cm	1.7 mm

Incidence of Lateral Pelvic Nodes : 23%.

Oncologic Outcome

- Median Follow up Period 72 Months
- Range 24-120 Months

- Five Years Actuaurial Survival 79%
- Local Recurrence Rate 9%.

Functional outcome

Pattern and frequency of bowel motions.

Stool frequency/day	Number	Percentage %
< 3	18	50
4-6	12	33.3
7-10	2	5.5
Fragmentation	12	33..3
Urgency	8	22.2
Discrimination	30	83.3
Alimentary control	18	50
Antidiarrhoeal drug	6	16.6

Continence according to Kirwan scale

	Number	Percentage %
Perfect	26	72.2
Incontinence to flatus	6	16.6
Minor soiling	2	5.6
Major soiling	0	0
Indiscriminate to flatus&stool	2	5.6

Conclusion

- The suggested technique is a valid alternative to APR following down staging for ultra-low rectal tumours.
- Local recurrence & overall survival are not affected by this technique.
- Better quality of life rendering the patient with no stoma.

Thank You