# TRANSPERINEAL COLOANAL ANASTOMOSIS IN VERY LOW RECTAL CANCER AFTER NEOADJUVANT CHEMOIRRADIATION in

# female patients

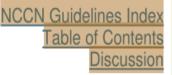
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NCCN Guidelines Version 2.2018 Rectal Cancer



Colorectal cancer is the fourth most frequently diagnosed cancer and the second leading cause of cancer death in the United States. In 2018, an estimated 43,030 new cases of rectal cancer will occur in the United States (25,920 cases in men; 17,110 cases in women). During the same year, it is estimated that 50,630 people will die from rectal and colon cancer combined. (seigal et al 2018)



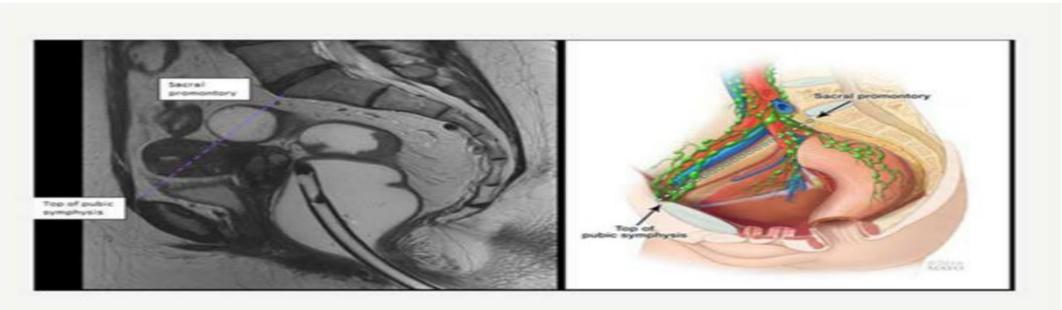
In Egypt, colorectal cancer constitutes 4.2% and come at seventh rank (7<sup>th</sup> in men and 4th in female) and the median age 50 years at NCI, in Cairo. **(M.Nabil et al., 2013)** 

El Minia registry was done 1n 2009,150 colorectal cancer cases were registered These cases were 81 male and 69 females with male to female ratio of 1.2:1. They represented3.3% of all incident cancers, Colorectal cancer ranked seventh in either males or females



#### NCCN Guidelines Version 2.2018 Rectal Cancer

#### **Definition of Rectum**



"Rectum" is defined as the portion of bowel located below the pelvic inlet (an imaginary line drawn from the sacral promontory to the top of the pubic symphysis) as determined by a dedicated MRI of the pelvis

- Upper rectum: above the anterior peritoneal reflection
- Mid-rectum: at the anterior peritoneal reflection
- Lower-rectum: below the anterior peritoneal reflection

# Background

- Surgical treatment of rectal cancer is well standarized for high and midrectal cancers ; the former are treated by partial and the later by total mesorectal excision , both receiving sphincter preservation BUT
- . On the other side , surgical treatment of low rectal cancer is controversial . The standard surgical treatment for rectal adenocrcioma located up to 5 cm from the anal verge was the abdominoperineal resection (APR). This happens because the length of the anal canal is from 2 to 4 cm ,and the disease free longitudinal margin should have at least 1 cm In order to avoid the definitive colostomy in these patients,the intersphinteric resection(IR) was first described in the 1980s, and well established in the 1990s by Schissel et al

## Background



The level of mucosal incision was marked with the electrocautery: *The level of mucosal incision was marked with the electrocautery*. *Figure 2. Manual at 12h, 3h, 6h e 9h.* 

A Gelpi retractor or an autostatic Lone Star retractor (Figure 1) is placed in the anal canal to expose the mucosa, which is circumerentially opened, usually on the dentate line or 1 cm from the distal margin of the tumor. pull-Through procedure was previously described and modified by many authers as sphincter saving procedure .These techniques were efficient in local controlling of disease especially after standardization of noe- adjuvant chemoirradiation in low rectal cancer

# Background

But functional out come were not satisfactory according to Wexner score

Type of incontinence	Never	Rarely	Sometimes	Usually	Always
Solid	0	1	2	3	4
Liquid	0	1	2	3	4
Gas	0	1	2	3	4
Wear Pad	0	1	2	3	4
Lifestyle altered	0	1	2	3	4

Wexner score for fecal incontinence

And this is due to extensive dilatation of anal sphincters, Especially in Egyptian multiparous female with weak pelvic floor muscle .

# objectives

The aim of this procedure is to operate female patients with very low rectal cancer udergo surgical excision and coloanal anastomosis through perineal approache namely the sub levator extrasphincteric exposure of the low rectum.

# patients and methods

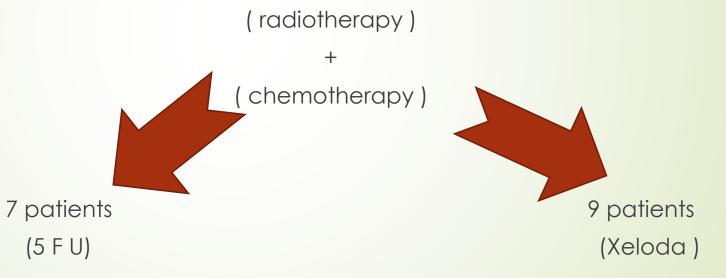
### patient selection

In the period between December 2013 till December 2017, 16 patients (female)age range 27-62 years had the combined abdomino- perineal approach for completion of rectal resection.

All patients were treated in a tertiary referral oncology center El Minia oncology center, El Minia ,Egypt.

All of the patients were low rectal tumors and tumor distance from anal verge less than 5 cm, and absence of distant metastasis

# all of them received neoadjunant chemoirradiation



# Pre-operative Chemoradiotherapy

#### Before

#### After





## procedure

- All operations done by open surgery.
- After releasing of the left colon and sigmoid

#### **Full Bowel Mobilisation**



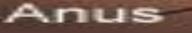
# and then mobilization of rectum and performing total mesorectum excision (TME)



# The patients was placed in lithotomy postion

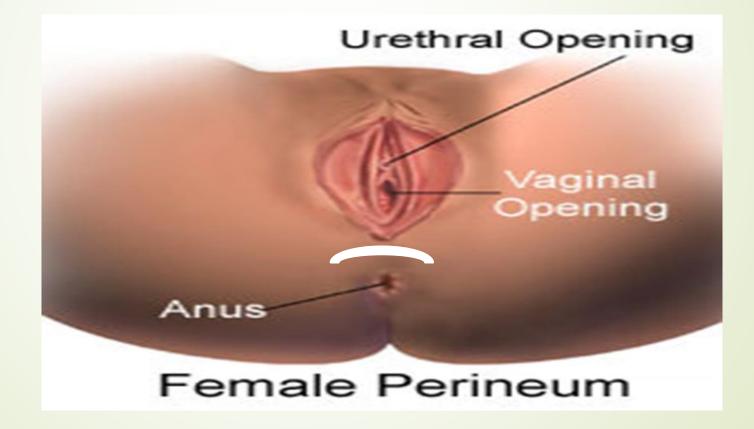
#### Urethral Opening

Vaginal Opening



#### Female Perineum

# then rectum was exposed by incision in the perineum

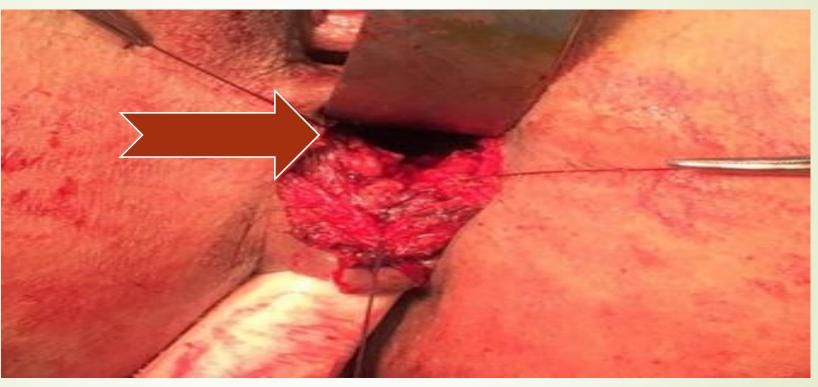




Diver through perineal incsion between post vaginal wall and anal canal



Index finger in the anal canal

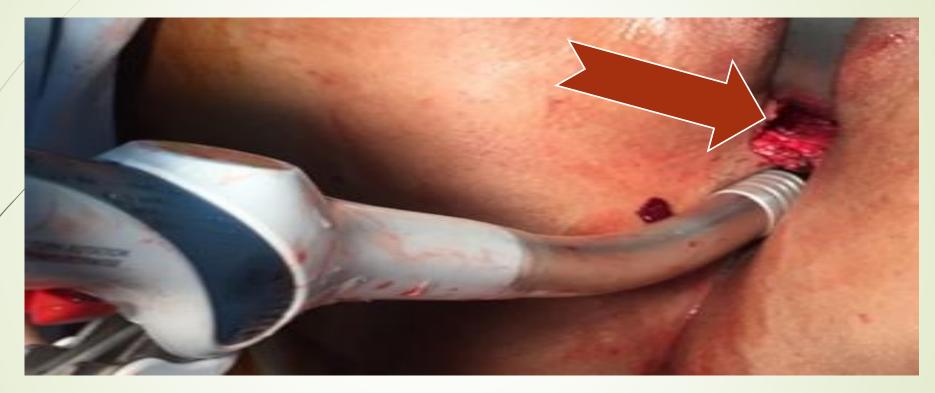


closure of anal stump by hand swen

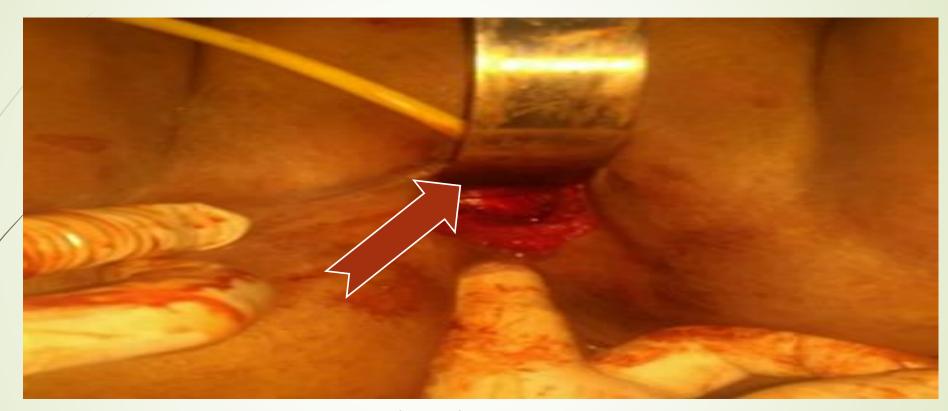
### anastomosis was performed by circular staper 28



Anvel of circular stapler coming from anal



Firing of stapler



Colo anal anastomosis



1- proximal circular knob2- distal circular knob

all patients had protective ileostomy and their ostomy was closed after 6 weeks -6 months according postoperative pathology

All specimens sent for histo pathologic examination with separate distal safety margin (distal circular knob from stapler).

# Results

- The planned original procedure was successfully completed ,the mean operative time was 180 minutes and the mean blood loss was 300 ml .In pathology report after the tumor resection, the mean distance of distal margin of the tumor was 1.5cm and only one patient had involved distal margin ,but the separate margin from stapler was free .there was no intra or postoperative mortality .
- The patients were followed by CEA, chest x ray , colonscopy, liver ultrasound and MRI rectum .we have a one case of hepatic focal lesion after 9 months , other case of local recurence after 12 months and a third case of rectovaginal fistula during the follow- up for a mean 23 (12-36) months.

# Results

Evaluation of the patients after ileostomy closure were done by evaluation of degree of incotience by Wexner score and number of defecations which decrease from 7 times in first month to 5 times in second month and decreased a little less in next months with patient satisfaction.

one patient suffered from attacks of acute anal fissure during follow up and another patient anastomotic stricture that was easily dilated without affecting the continence status.

### conclusion

Through perineal incision in female separating post vaginal wall from anal canal and low rectum, we can completing low rectal cancer excsion ,achieving radical resection with preservation of the anal sphincters with acceptable degree of continence.



