



La cirugía mínimamente invasiva con extracción transanal en la Colitis Ulcerosa

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Montreal classification of extent and severity of ulcerative colitis (UC)

Extent / severity		Anatomy / definition
E1	Ulcerative proctitis	Involvement limited to the rectum (proximal extent of inflammation is distal to the rectosigmoid junction)
E2	Left-sided UC (distal UC)	Involvement limited to a portion of the colorectum distal to the splenic flexure
E3	Extensive UC (pancolitis)	Involvement extends proximal to the splenic flexure
S0	Clinical remission	Asymptomatic
S1	Mild UC	Passage of four or fewer stools / day (with or without blood), absence of any systemic illness and normal inflammatory markers (ESR)
S2	Moderate UC	Passage of more than four stools per day but with minimal signs of systemic toxicity
S3	Severe UC	Passage of at least six bloody stools daily, pulse rate of at least 90 beats/min, temperature of at least 37.5°C, hemoglobin of less than 10.5 g /100 mL and ESR of at least 30 mm/h

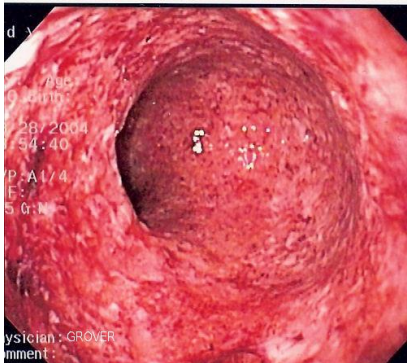
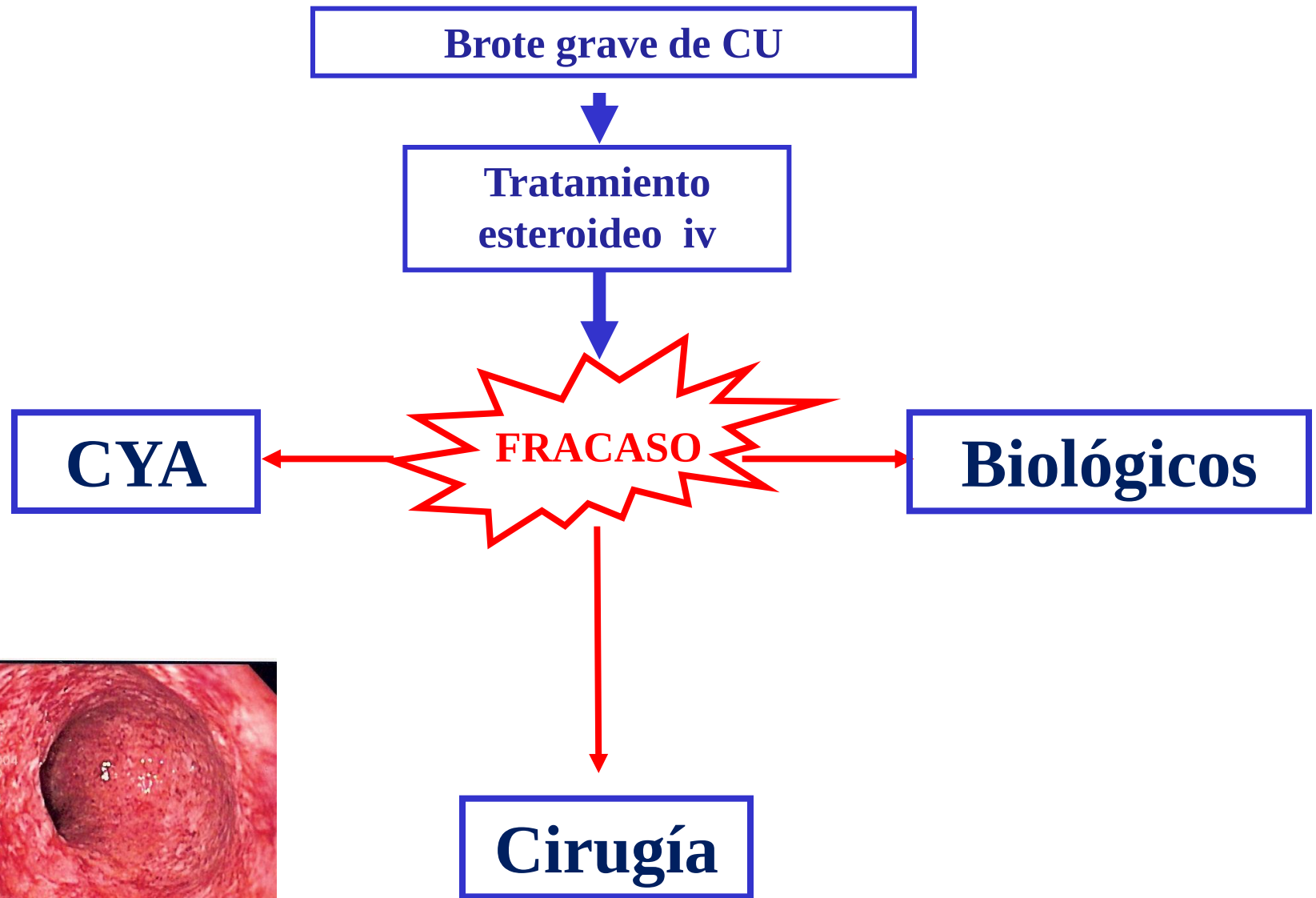
ESR, erythrocyte sedimentation rate

Ann Gastroenterol. 2014; 27(2): 95–104.

PMCID: PMC3982647

Clinical course and prognosis in ulcerative colitis: results from population-based and observational studies

[Irlil Monstad](#),^a [Øistein Hovde](#),^b [Inger Camilla Solberg](#),^a and [Bjørn A. Moum](#)^a



ECCO 2012

- ECCO Statement 7A

El **retraso** de la cirugía se asocia a **más complicaciones** quirúrgicas (EL4, RG C)

*(ECCO Statement 5E: **5-7 días** tras segunda línea, ciclosporina o infliximab)*

La **colectomía subtotal** con ileostomía es lo indicado cuando fracasa el tratamiento médico o ha tenido más de 6 semanas 20mg de prednisolona/día (EL 4, RG C)

Si es posible, con abordaje laparoscópico (EL4, RGC)

- ECCO Statement 7B

Cuando se realiza una colectomía de urgencia por colitis ulcerosa se debe **preservar todo el recto y la arteria mesentérica inferior**, para facilitar el subsiguiente reservorio (EL 4, RG C)

ECCO 2012

ECCO Statement

La longitud máxima del manguito mucoso rectal ha de ser de 2cm (EL 4, RG C)

El equipo quirúrgico debe ser capaz de realizar mucosectomía y anastomosis manual además de anastomosis mecánica (EL5, RG D)

El tipo de anastomosis no condiciona la probabilidad del cáncer en la mucosa residual (EL 4, RG C)

Se recomienda ileostomía lateral, aunque puede ser evitada en algunos casos (EL 3b, RG C)

Tendencia

Ellis MC y cols. World J Surg 2011

1990-1996/ 2000-2006

–Colectomy: 30362

–Proctocolectomy: 6085

Center

Rural: 7% → 4.8%

Urbano no docente: 43.7% → 28.4%

Urbano docente: 49.3% → 66.8%

Mortality

- Colectomy

- 3.8% → 4.6% (p=0.0003)

- 3.6% → 5.6% (p<0.0001) 1995-96 /2005-6

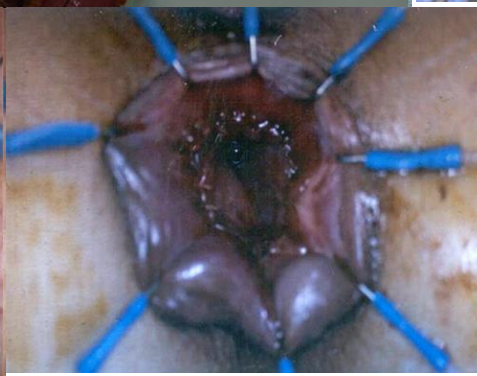
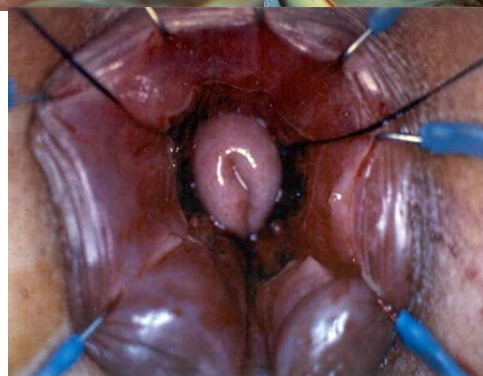
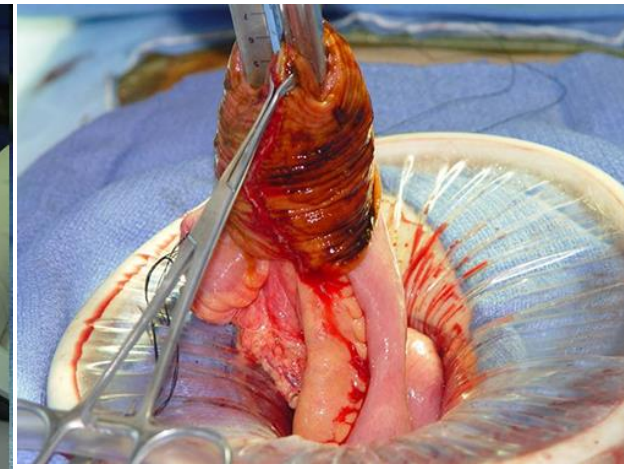
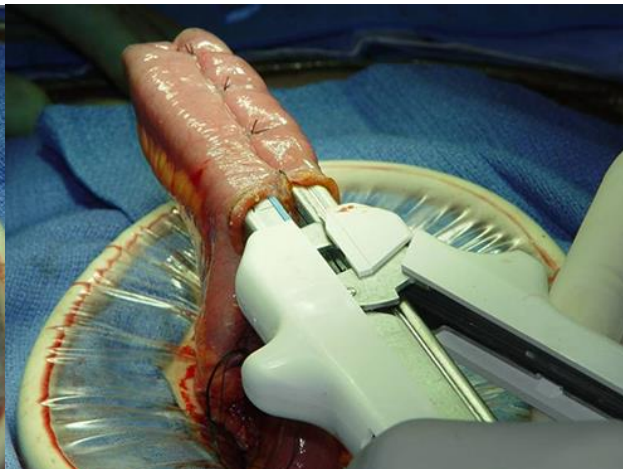
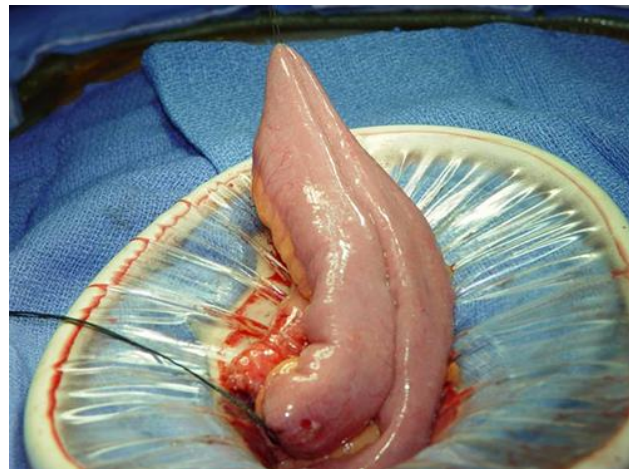
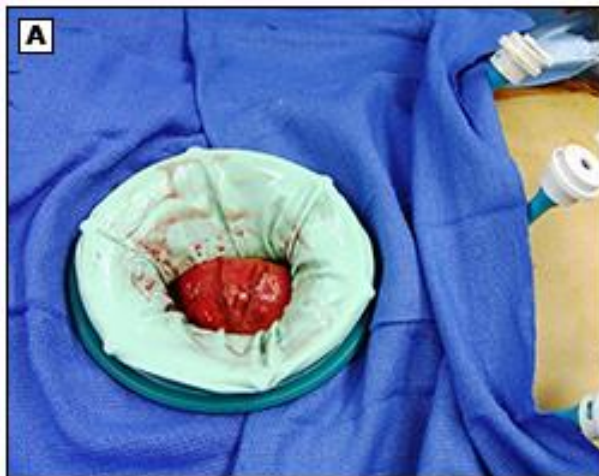
American College of Surgeons National Surgical Quality Improvement Program (2005-2008)

676 IPAA-----339 **IPAA LAP**
(incluye CU y PAF)

Complicaciones mayores (OR=0.67, 95% CI:0.45-0.99, p=0.04)
Sepsis **<LAP**

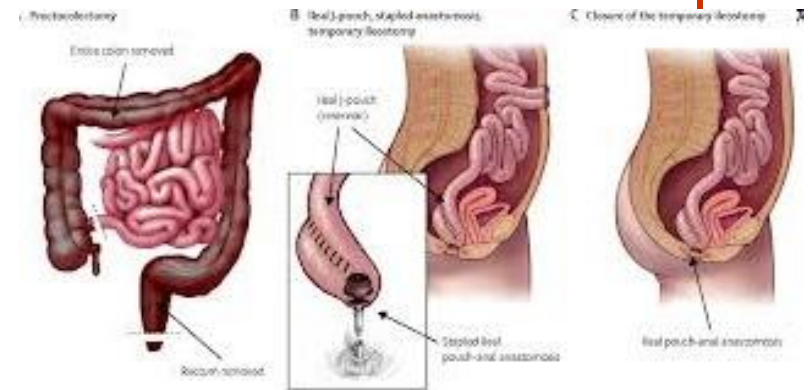
Complicaciones menores (OR=0.44, 95% CI:0.27-0.70, p=0.01)
Infección herida quirúrgica **<LAP**

Duración IQ (>335min (75th percentile) >LAP
Abierta 46(13.7%) LAP 124(36.6%) p<0.0001)



CIRUGÍA

- **Abordaje:**
 - Abierto
 - Laparoscópico/Incisión única/ **Endoscópico transanal**
- **Extensión de la resección**
 - ***Colectomía subtotal-total***
 - ***Panproctocolectomía***
 - ***Proctectomía residual***
- **Reconstrucción**
 - 1/2/3 tiempos



- 1.- Panproctocolectomía y reservorio ileal
- 2.- Colectomía subtotal e ileostomía terminal
Proctectomía y reservorio sin ileostomía
- 3.- Colectomía subtotal e ileostomía
Proctectomía y reservorio
Cierre de ileostomía

INNOVACIONES

1. Puerto único

2. Colostomía virtual

3. **Extracción transanal**

- ☐ Colectomía
- ☐ Muñón rectal



Tech Coloproctol 2013 Feb;17 Suppl 1:S29-34.

Single-port laparoscopic colectomy.

Costedio MM, Remzi FH

Colorectal Dis 2012 May;14(5):634-41

Outcomes for case-matched **single-port** colectomy are comparable with conventional laparoscopic colectomy.

Wolthuis et al.

Ann Surg 2012 Jan;255(1):66-9.

Single-incision versus standard multiport laparoscopic colectomy: a multicenter, case-controlled comparison.

Champagne BJ et al.

SINGLE PORT LAPAROSCOPIC TOTAL COLECTOMY WITH END ILEOSTOMY IN THE ACUTE SETTING

Mohamed Moftah, Ronan Cahill

Department of Colorectal Surgery, Beaumont Hospital, Dublin, Ireland.

INTRODUCTION: Proponents of single port laparoscopy tend to claim improved cosmesis in elective operations as its major rationale. However minimizing abdominal wounding is especially important in debilitated patients who need acute operative intervention for acute severe pancolitis recalcitrant to medical therapy. In addition to malnutrition, systemic toxemia and iatrogenic immunosuppression, their early convalescence needs to include stoma education while further surgery (whether ileoanal pouch formation/proctectomy for those with ulcerative colitis or ileorectal reanastomosis/other reoperation for those with Crohn's disease) is often needed in the intermediate term.

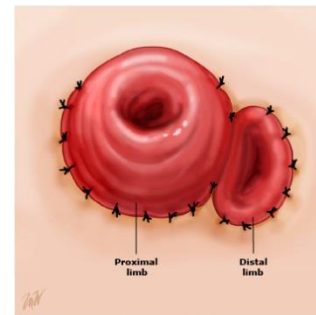
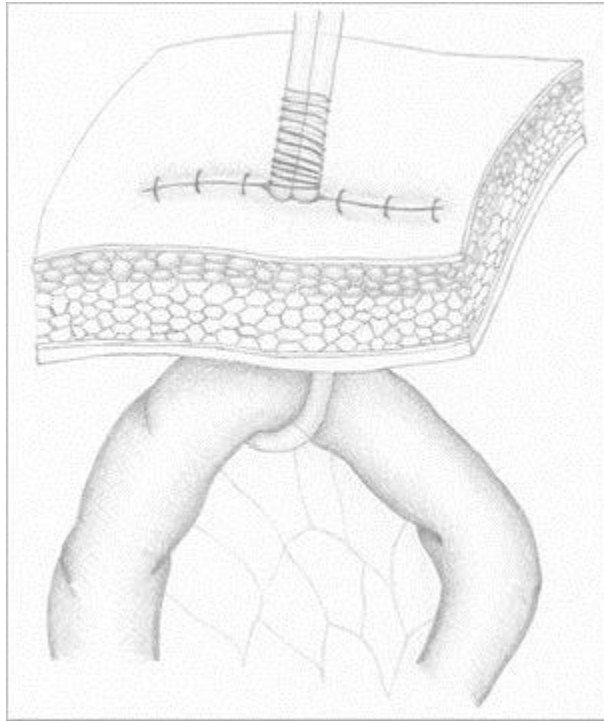
METHODS: Having previously developed and standardized the procedure in the semi-elective setting, we have now the departmental expertise and confidence to provide the approach on-call. In short, the operation involves placement of the single port access device at the site intended for end ileostomy formation as the sole transabdominal access. For this, we favor the Surgical Glove Port as the most ergonomically and economically advantageous device currently available. This access device is constructed table-side by inserting standard trocar sleeves into the finger tips of a sterile surgical glove. The glove cuff is then stretched over the outer ring of a standard wound protector-retractor (ALEXIS, Applied Medical) in situ at the ileostomy site trephine. Standard straight rigid laparoscopic instruments in addition to a 30 degree lens camera are used. The operation is commenced distally with early rectosigmoid transection and then proceeds proximally in a close pericolic plane using an energy sealer-divider device (Liagsure, Covidien). A transanal catheter is left in situ for 72 hours postoperatively. As no specialized equipment is required and only two members of the expert surgical team are needed regardless of which theatre suite is available, out-of-hours service is facilitated.



Photographs demonstrating construction of single access surgical glove port at the site intended for stoma formation in a patient undergoing urgent operation.

RESULTS: This approach has been considered in every patient requiring acute colectomy for pancolitis over the past ten months. Of ten such patients, three had standard multiport laparoscopic resection chosen (due to morbid obesity, colitic perforation with peritonitis and unstable critical systemic illness). Of the other seven patients (two females), six (one with Crohn's pancolitis and five with ulcerative colitis) had their entire procedure completed by the single port approach. One needed three additional 5mm ports inserted to facilitate adhesiolysis of dense adhesions (prior midline laparotomy with right nephrectomy for trauma). The mean (range) age of the patients was 43 (36-59) years while mean (range) BMI was 27 (21-28) kg/m². All were on significant immunosuppressant/biological therapies. None had antegrade mechanical bowel preparation preoperatively. Mean (range) length of theatre time from patient entry to exit was 190 (165-210) minutes. There were no significant intraoperative complications and only two minor (Clavien Class One) postoperative problems. Modal (range) postoperative day of discharge was 4 (3-6). As only trocar sleeves are used with the glove port construct, laparoscopic access costs were reduced by over 60%.

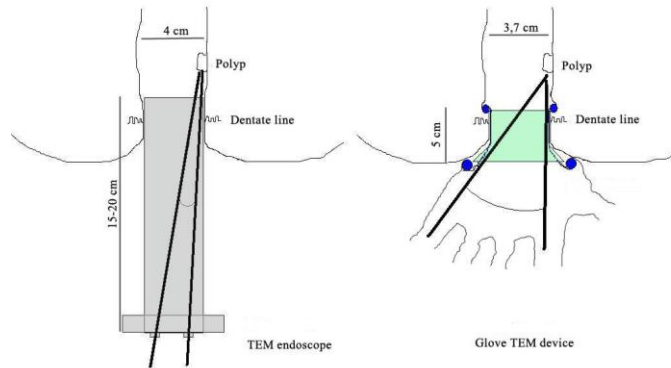
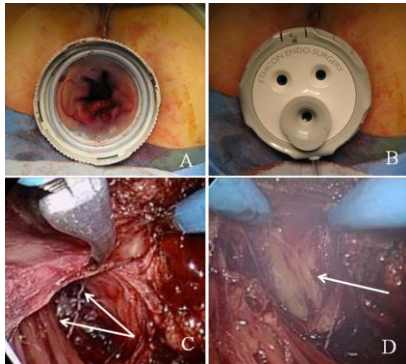
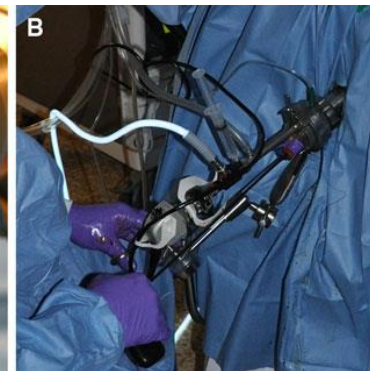
CONCLUSIONS: Single port laparoscopic total colectomy is not only safe, feasible and effective but appears useful and beneficial for patients. In theatre costs are not increased and postoperative hospital stays are shortened.



Dis Colon Rectum. 2013 Jan;56(1):29-34.

Ghost ileostomy in anterior resection for rectal carcinoma: is it worthwhile?

Mori L¹, Vita M, Razzetta F, Meinero P, D'Ambrosio G.



Extracción transanal

+ Minimamente invasiva

Colectomía total

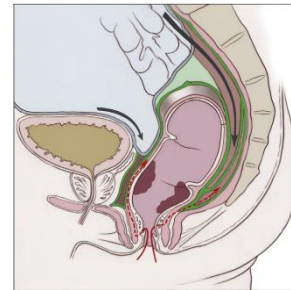
Laparoscópica
/Robótica

Proctectomía

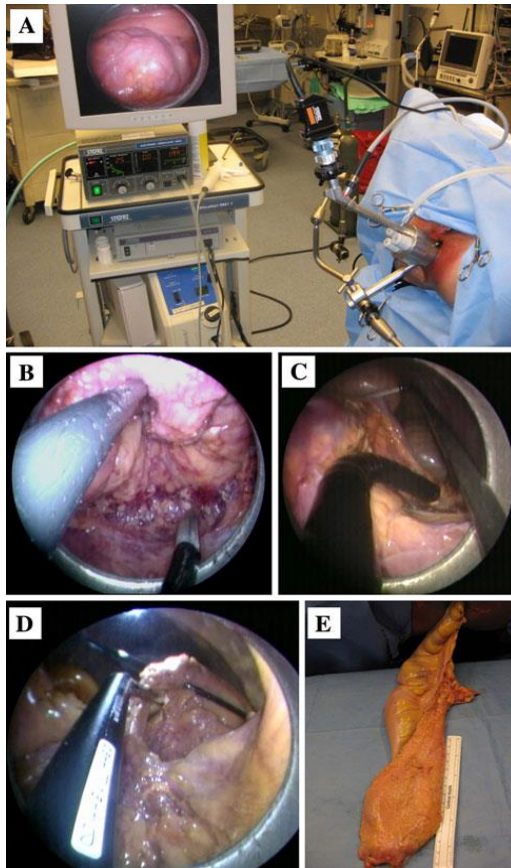
Endoscópica transanal
asistencia
laparoscópica/Robótica

Proctocolectomía

Laparoscópica
interesfinteriana



Telem DA, Han KS, Kim M-Ch et al. Transanal rectosigmoid resection via natural orifice transluminal endoscopic surgery (NOTES) with total mesorectal excision in a large human [cadaver series](#). Surg endosc 2013, 27:74-80



- Transanal (19)
- Transanal + transgastric (5)
- Transanal + laparoscopic (8)
 - <complicaciones
 - >longitud espécimen

**Transanal endoscopic surgical
proctectomy for proctitis case
series report: Diversion,
radiation, ulcerative and
Crohn`s disease.**

Mc Lemoire EC et al.

Global Journal of
Gastroenterology 2013; 1:51-57

6 pacientes

Gel Point Path

Estancia: 5d
Complic:
2 infecc herida
periné

TES

TES+SIL

TES+Laparoscopia

**Transanal endoscopic
microsurgery: a new technique
for completion proctectomy.**

Liyanegge C et al.

Colorectal Disease 2013; 15:
e542-e547

**11 pacientes (9 EII)
(recto residual >8cm)**

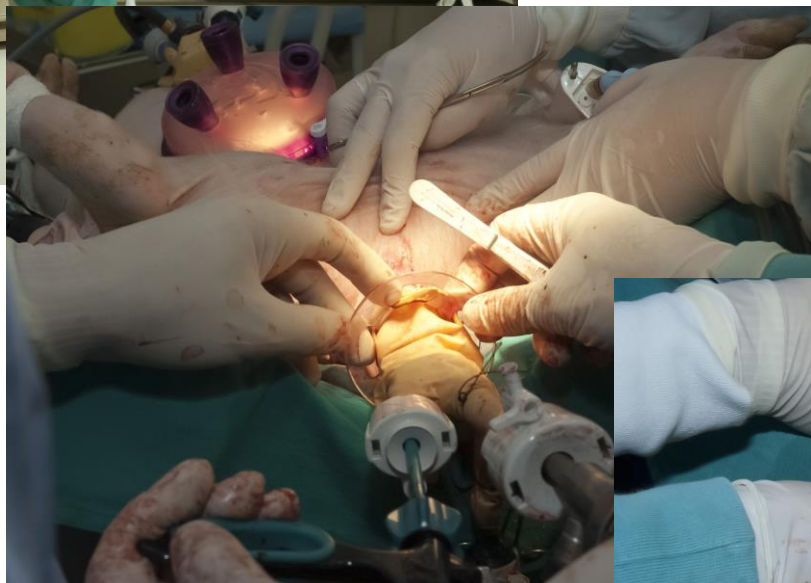
TEM-Wolf

Estancia: 6d
Complic:
4 Retraso cicatriz.
periné

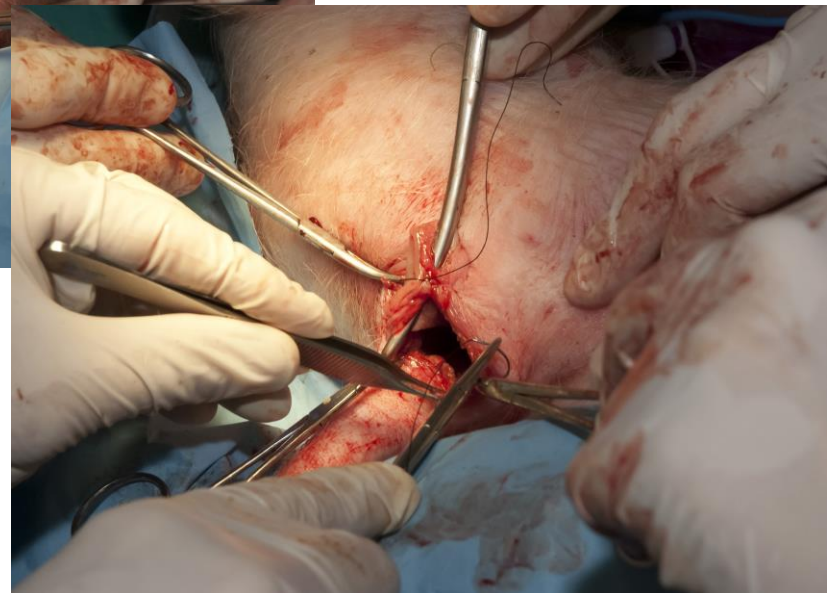
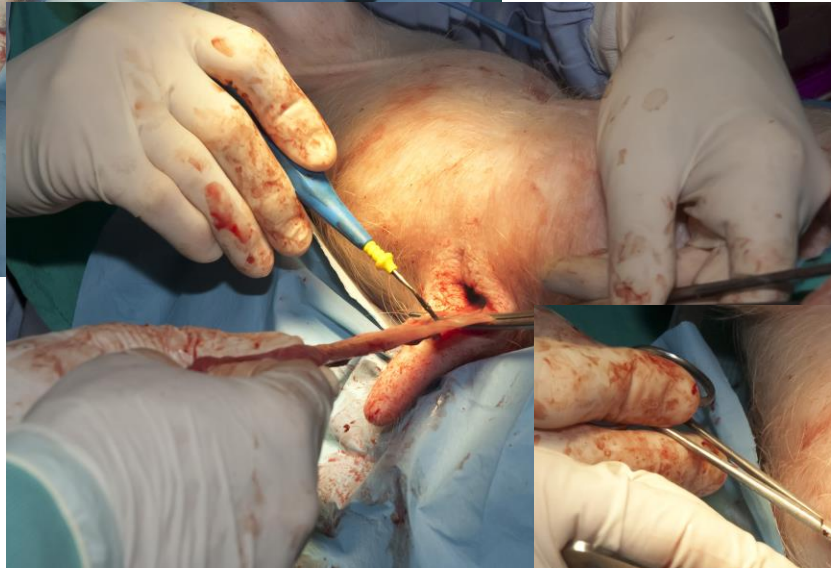
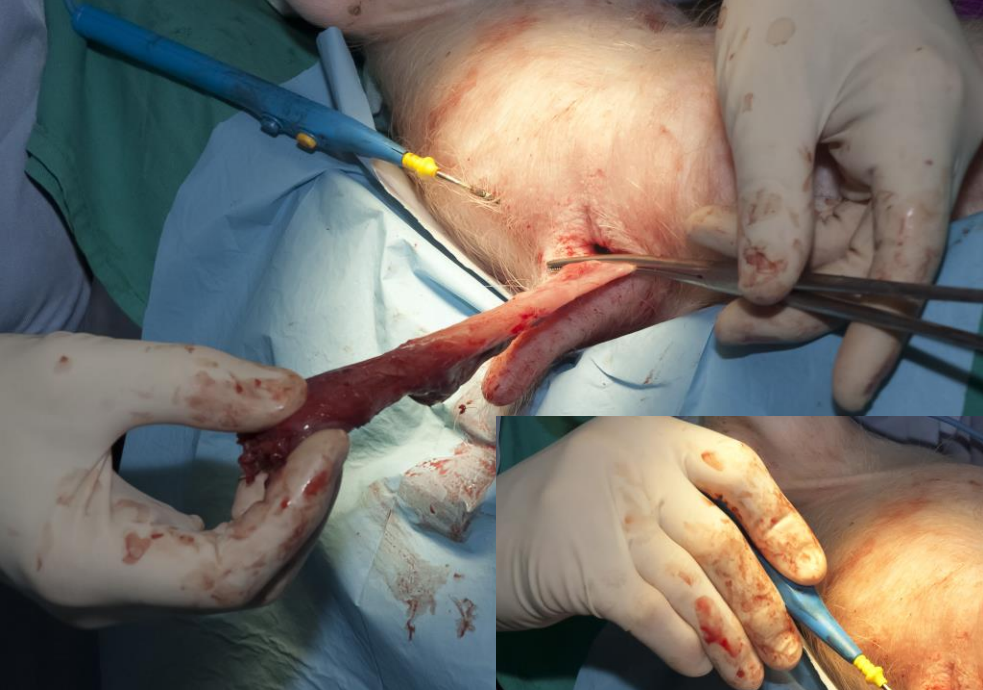
TES

TES+Laparoscopia

TES+ Laparotomia



Proctectomía transanal con Glove-Port y anastomosis manual



Proctectomía transanal con Glove-Port y anastomosis manual

Extracción transanal en CU

Minimamente invasiva

Colectomía
total (1)

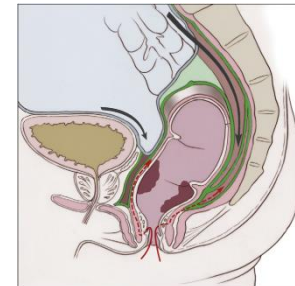
Laparoscópica

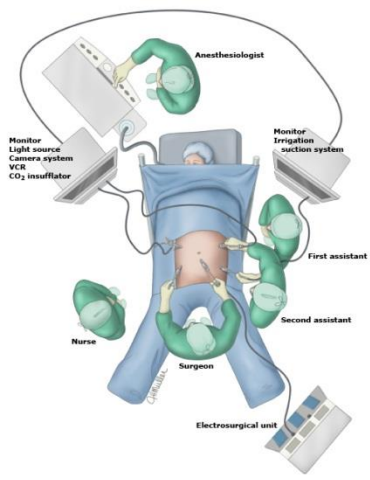
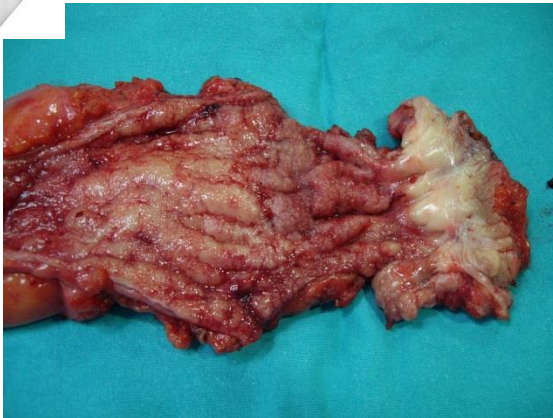
Proctectomía
(2)

Endoscópica transanal
asistencia laparoscópica

Proctocolectomía
(1)

interesfinteriana





Conclusiones

- El abordaje abdominal de elección para la colitis ulcerosa es el laparoscópico
- El puerto único se debe valorar en pacientes seleccionados
- Se debe considerar la ileostomía virtual de forma selectiva
- *La vía endoscópica transanal con o sin apoyo laparoscópico permite realizar resecciones aún más mínimamente invasivas, tanto colectomías totales como proctocolectomías e incluso rectos residuales.*

Conclusiones

- Intervenciones cada vez más escasas, complejas y personalizadas.
- En centros con medios e importante dedicación (especialización) médico-quirúrgica coordinada.