

Case presentation

Dr. Mona Dumbrava Fundeni Clinical Institute Male, 23 years

Colicky abdominal pain

- No intestinal transit for gas and feces
- Weight loss 12kg/ 3 years
- 4-5 stools/day sometimes with mucus

Personal History

- Recent laparotomy (suspected of perforated peptic ulcer?) – entire small bowel infiltrated, with cardboard appearance
- Intraoperative lymph node biopsy: insignificant result
- Ileal Crohn's disease?
- Salazopyrin 2 g /day

Laboratory Findings

Hgb - 9,8mg/dl Ht - 30,9% MCV - 68,9 fl MCHC - 29,8 mg/dl Fg - 497

Total proteinemia - 4,5 g/dl Albuminemia - 2,5 g/dl

Fe 7 - ug/dl Ca 8,2 - mg/dl Mg 2,2 - mg/dl Glycemia - 80mg/dl BUN - 20mg/dl ASAT - 20u/l ALAT - 25u/l Cholesterol - 124mg/dl

Imagistic Examination

- Abdominal X-ray: One large hydroaeric level in the umbilical region with large dilation of an intestinal segment in the left flank
- Abdominal US: Small quantity of fluid in the Morrison space and pelvic region, with sediment
- Barium enema: Normal ileo-cecal valve; contracted, inhomogeneous caecum.

Pansdorf Examination

• Jejunal segments with thickened folds, pseudopolyps and small ulcerations, normal areas alternating with areas of stenosis of variable length (max. 20 cm)

Dyskinetic ileal segments with rare pseudostenotic areas

Patulous ileo-cecal valve



Endoscopy

- Esophagus and stomach normal aspect
- D1 with mild edema and deformation
- D2 normal aspect biopsy: normal

- IDR PPD = 18 mm (+)
- QuantiFERON test (+)
- Chest X-ray normal
- Pneumological consult: Intestinal TB

Diagnosis

- Intestinal TB
- Malabsorption with severe denutrition
- Mild sideropenic anemia
- Sub-obstruction syndrome (small bowel stenoses)

Treatment

- Antibiotics + TPN
- Corticosteroids
- Tuberculostatic treatment (7/7 regimen)

Favorable evolution – discharge with:

- Medrol 8 mg/day (decreasing dose)
- Tuberculostatic treatment
- IPP 40 mg/day
- Oral supplements: Fe, Ca, Folic Acid, Vitamins

After one month..

- Polyarthralgias, esp. in dorsal column and knees (with hidarthrosis), 2 weeks after the disruption of corticoid therapy
- Fbg 760 mg/dl; Fe 23 ug/dl

Rheumatologic exam: arthralgias related to Crohn's Disease (?) – begins treatment with Salofalk 2 g/day

Diagnosis: Possible jejunal Crohn's disease with articular involvement TREATMENT:

- Tuberculostatics (3/7)
- Budenofalk 9 mg/day
- Salofalk 2 g/day
- Oral supplements

Favorable evolution

After 10 months of AntiTB treatment...

- Admitted for recurrence of colicky abdominal pain and polyarthralgias
- Low Fe and Hgb; QuantiFERON (+),IDR PPD (+)
- Abdominal X-ray normal
- Pansdorf examination increased number of stenoses in the jejunum and also in the first part of ileum; multiple ulcerations/ pseudopolyps
- Barium enema same aspect of the caecum
- Abdominal US: persistence of minimum ascites

Treatment

- Medrol 16 mg/day (after 6 months without cortisone therapy)
- Salofalk 2 gr/day
- IPP 40 mg/day
- Oral Supplements

After other 3 months...

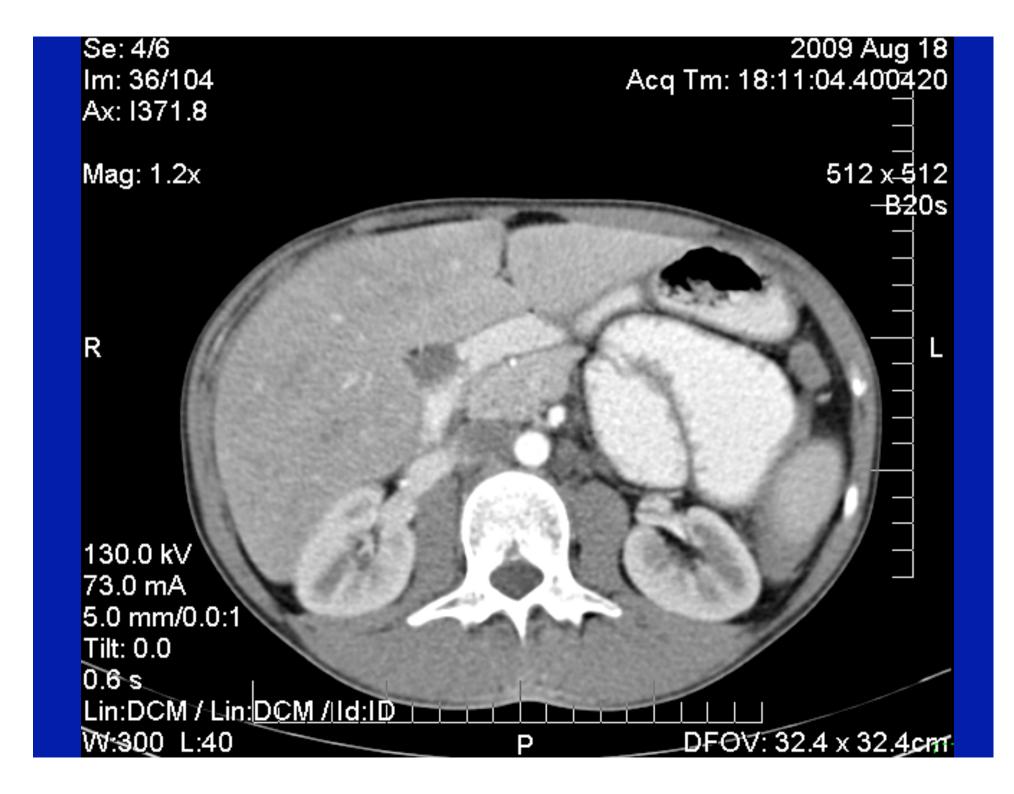
- Emergency admission for altered general status with vomiting, severe diffuse abdominal pain, asthenia
- Biological: inflammatory syndrome,
 Hgb=11mg/dl, Fe 23 ug/dl, Alb. 3 mg/dl
- Abdominal X-ray: few small bowel-hydroaeric levels

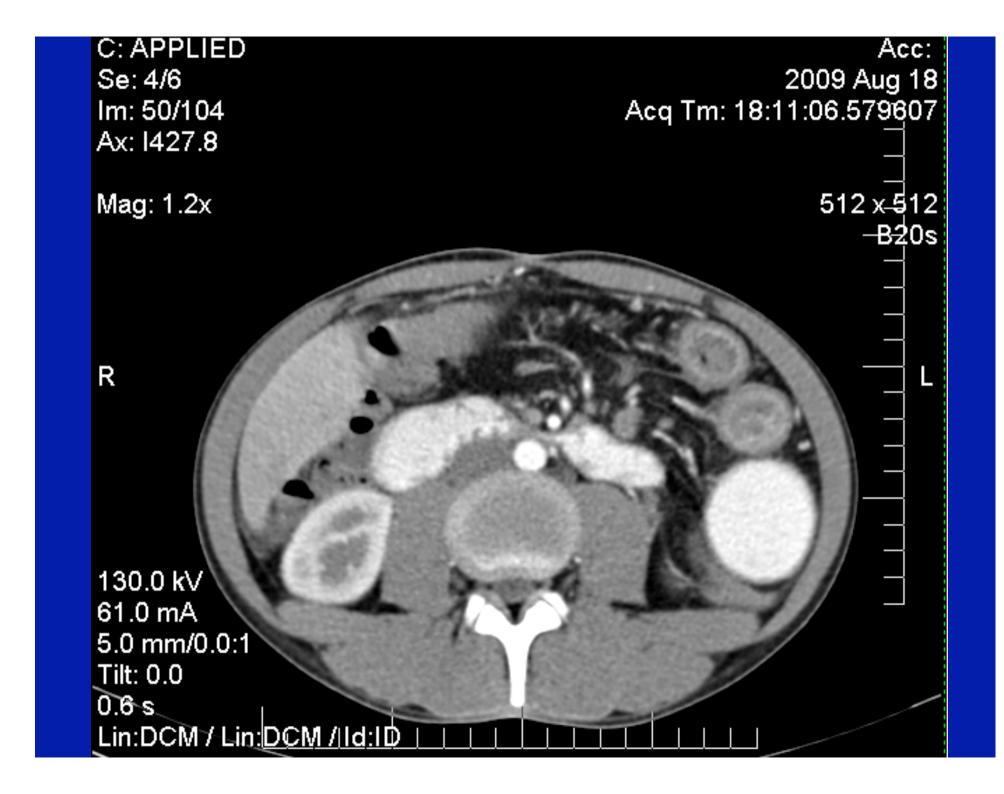
Abdominal CT

- ➤ Mural inflammatory changes of jejunum and ileum, including in ileocecal region
- ➤ Dilated proximal segments of jejunum above stenoses
- Small quantity of ascites;
- ➤ Multiple (reactive) adenopathies

Colonoscopy

Normal aspect of colon and terminal ileum Biopsy of ileum - normal



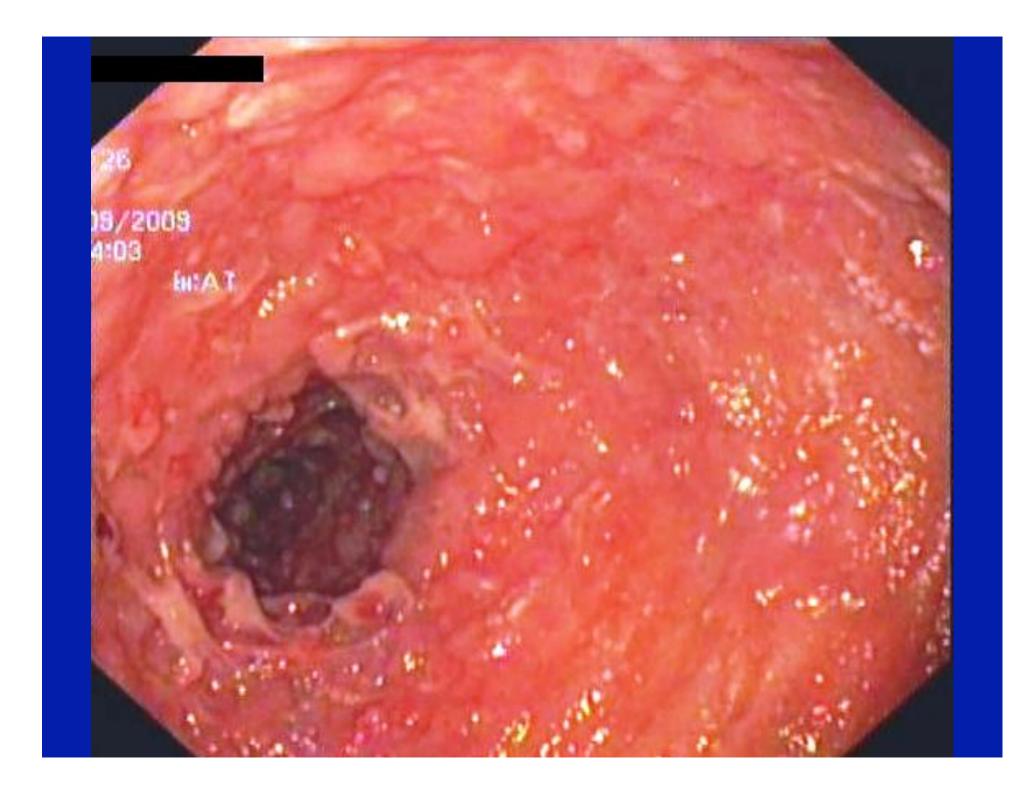


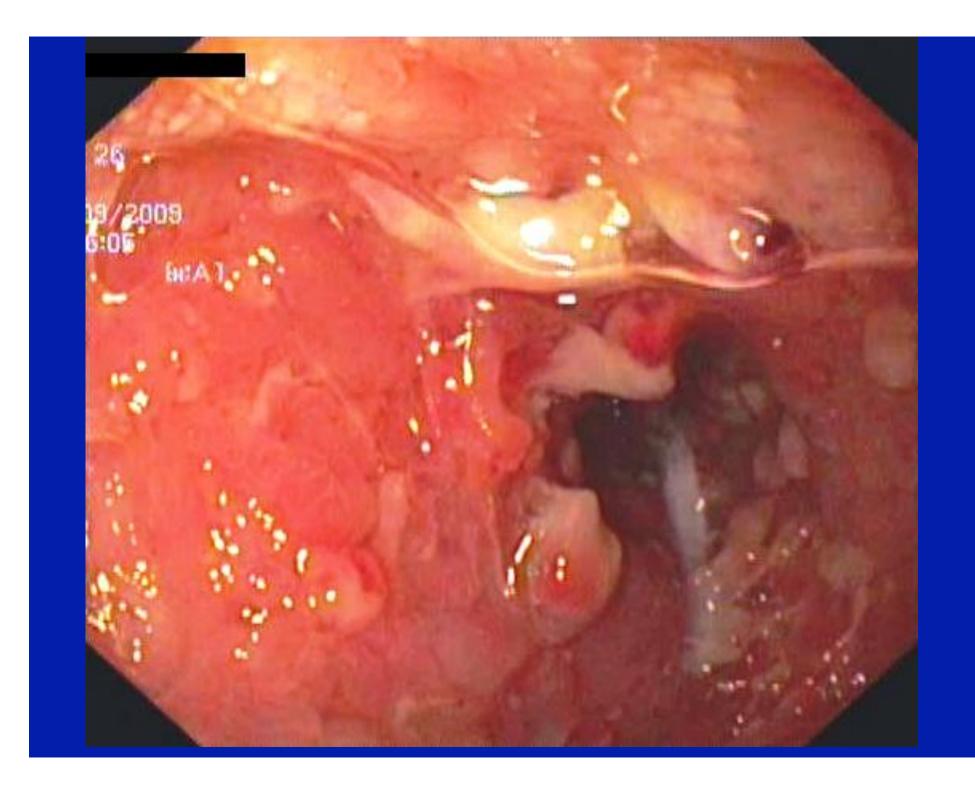
DILEMA:

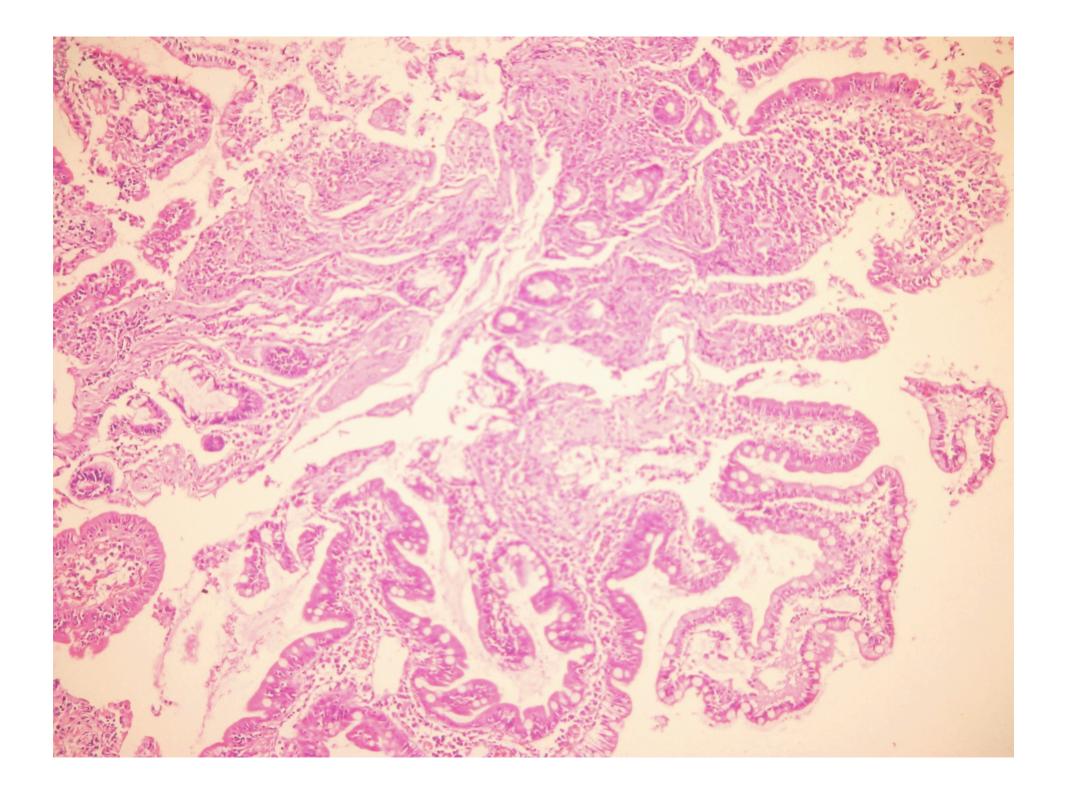
Crohn's Disease or Persistent Intestinal TB? Need for histopathological diagnosis

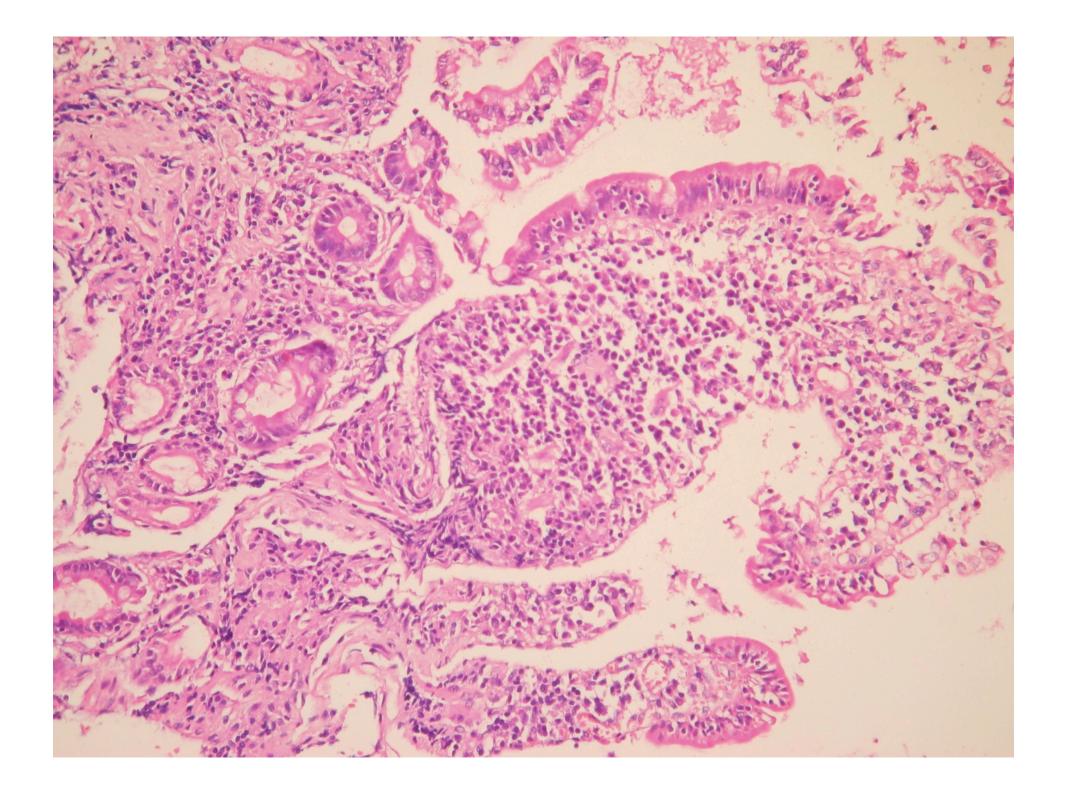
ENTEROSCOPY:

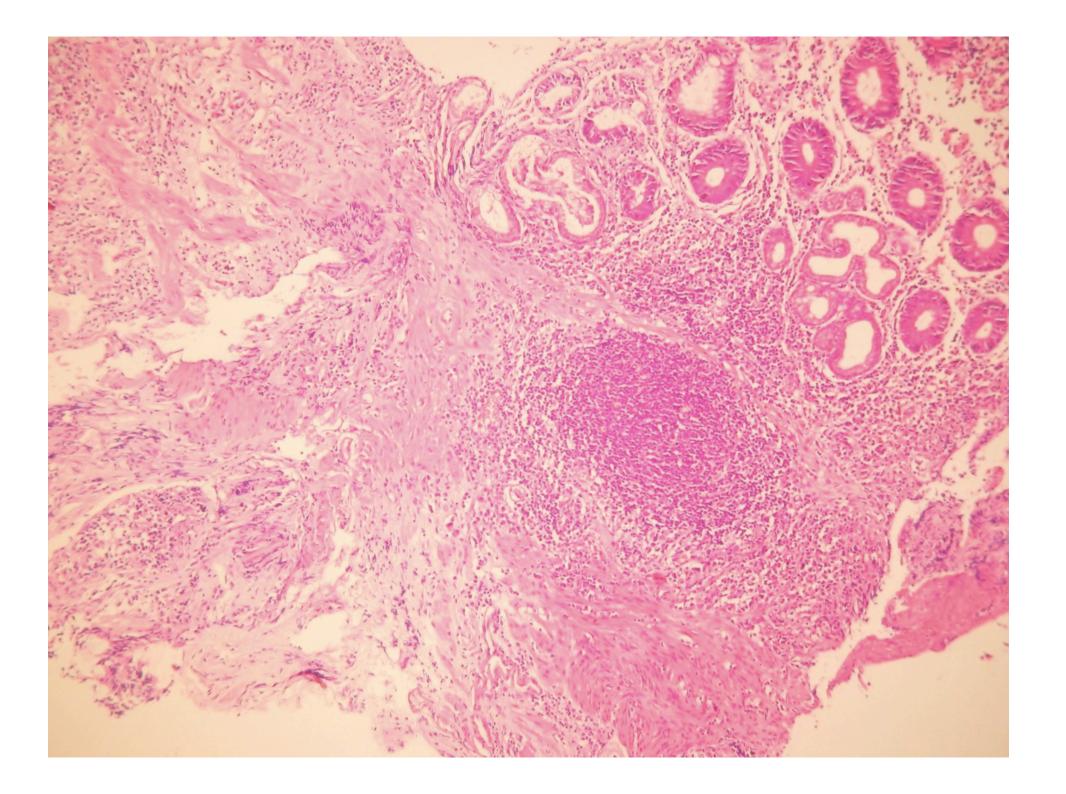
- stenosis of the middle jejunum, 9 mm diameter, with ulcerations biopsies
- multiple other ulcers and aphtoid ulcerations starting from the angle of Treitz - biopsies

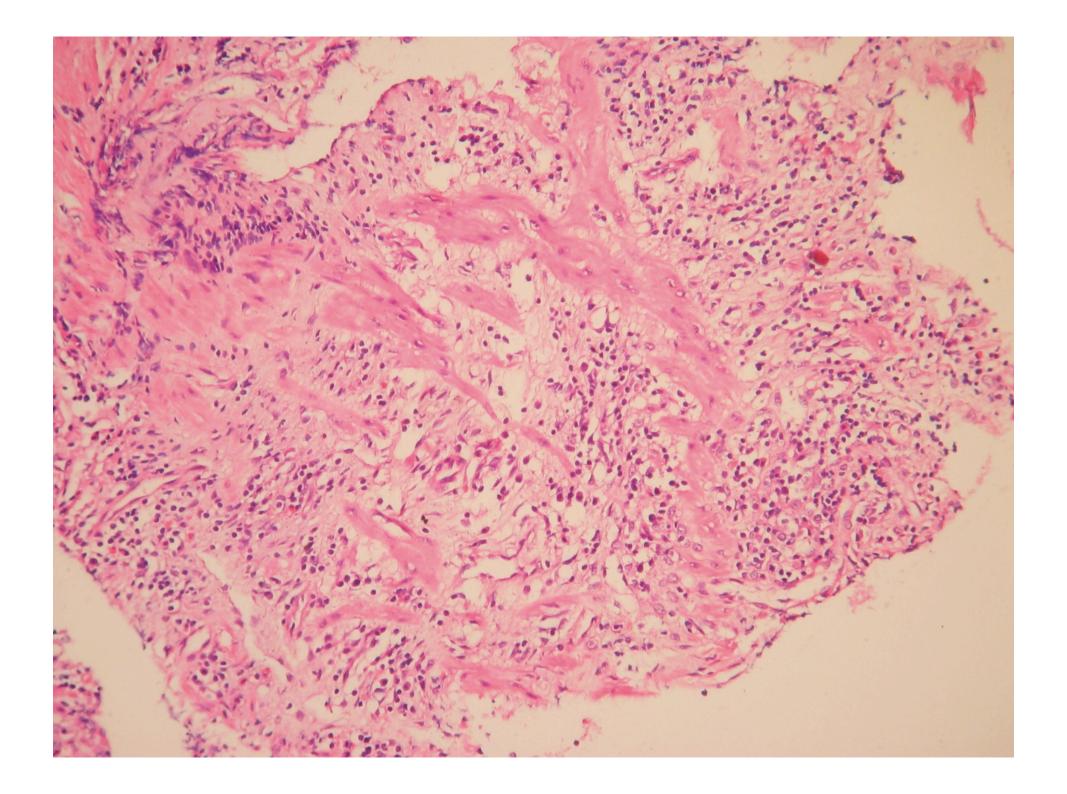


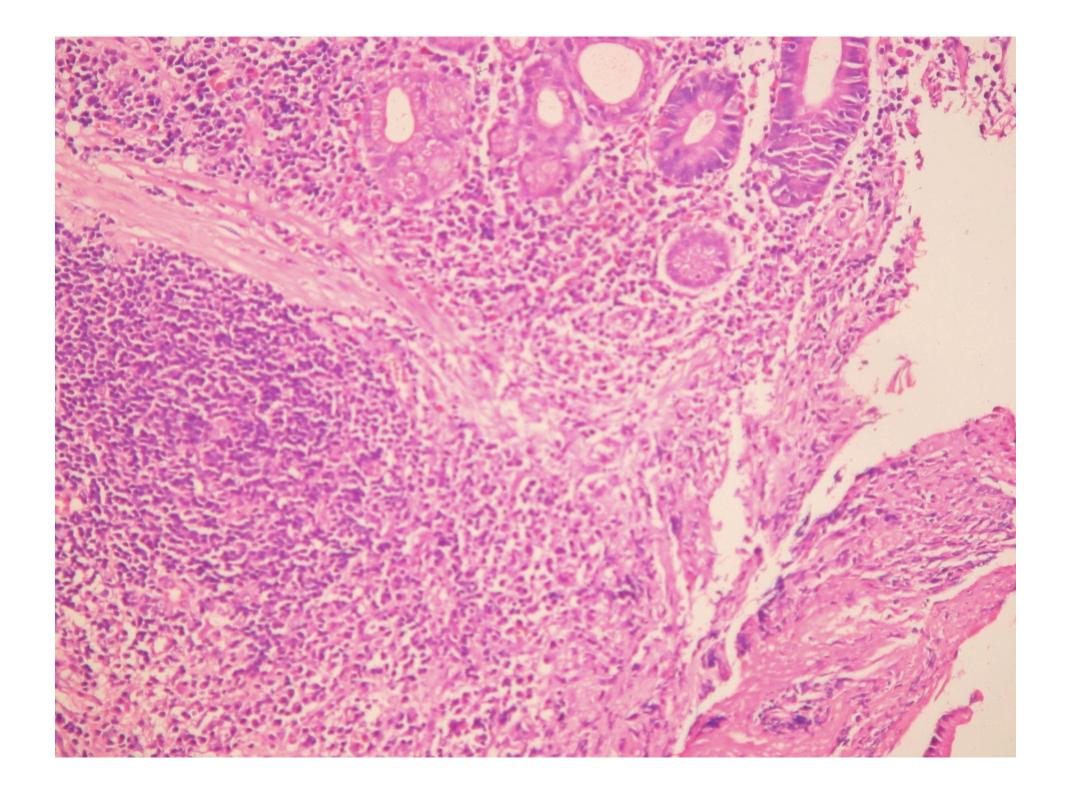


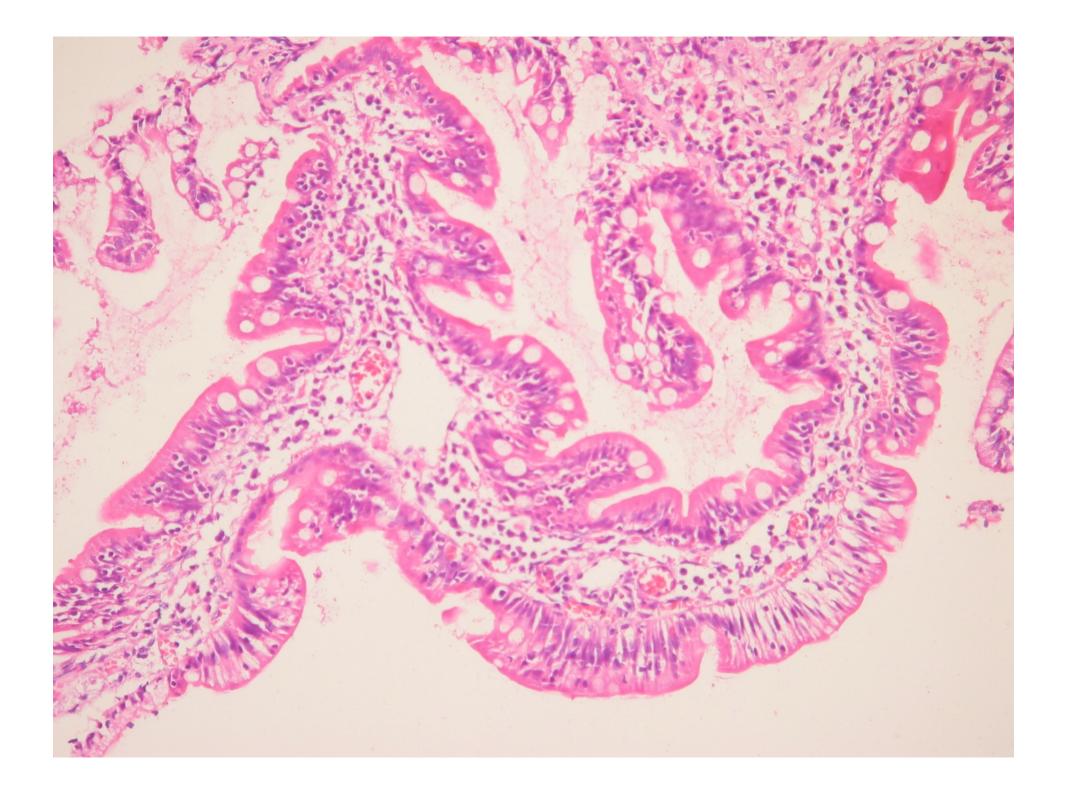








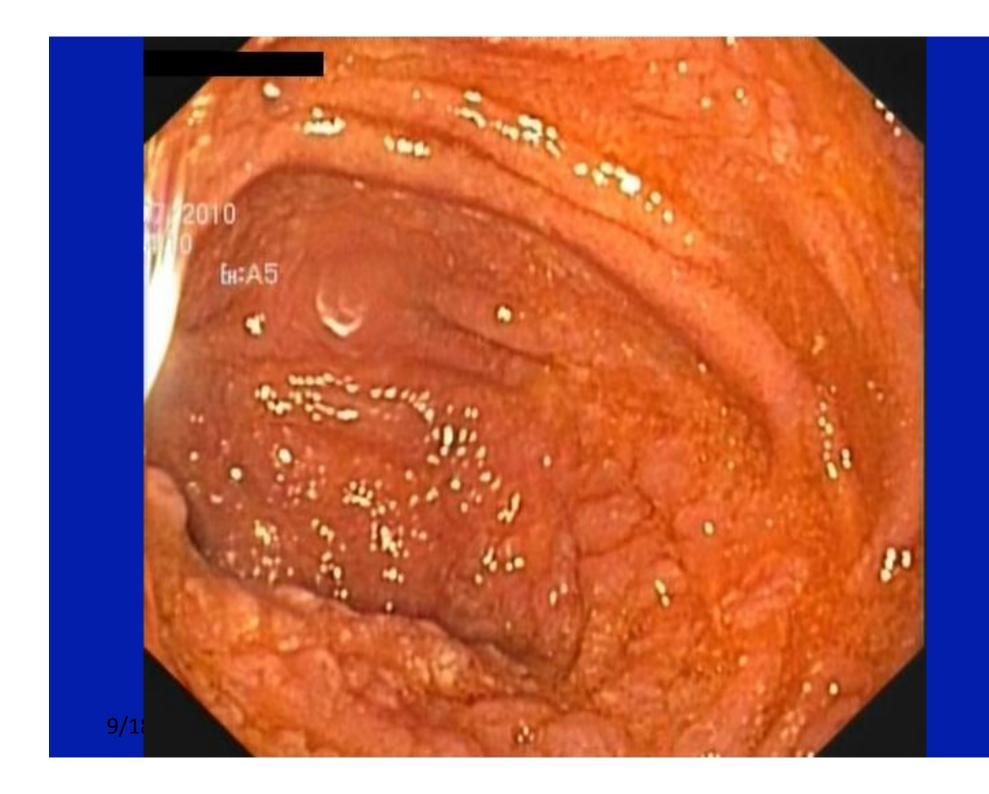




Final diagnosis

- ✓ Crohn's Disease of small bowell
- ✓ Severe denutrition due to malabsorption
- ✓ Mild sideropenic anemia
- ✓ Spondilitis

Current treatment: Infliximab – with good status and weight gain



TB versus CD – clinical challenge with therapeutic significance

- clinical history with endoscopic studies
- culture and polymerase chain reaction for Mycobacterium tuberculosis
- biopsy
- radiological investigations and response to therapy

Differential diagnosis ITB and CD – histopatologic features

GI TB	CD
Multiple, large or confluent granulomas	Small or microgranulomas
Caseating necrosis, calcification, epitheloid histiocytes	Without caseation
No chronicity features away from granulomatous areas	Changes of chronicity unassociated with sites of granulomatous inflammation
Prominent lymphoid cuff	Transmural lymphoid aggregates

PCR for mycobacterium DNA - test was found also positive in patients with CD. Culture for M. tuberculosis on endoscopic mucosal biopsies fragments has a low rate of positivity and the results require several weeks.

TB versus CD on mucosal biopsies Limitations of mucosal biopsies

Granulomas

- in only 50%-80% of intestinal mucosal biopsies from patients with clinically confirmed TB
- in 15%-65% of mucosal biopsies from patients with CD
 <u>Caseation and AFB</u> (the diagnostic features of TB) are found
- in only 18%-33% of cases of TB and
- in as low as 5% of cases CD!!!!.

Conclusions

- Small bowel stenoses difficult assessment of the etiology
- Broad differential diagnosis of small bowell Crohn's disease – infectious, drug induced, vasculitis, ischemia
- Enteroscopy with biopsies facilitate early diagnosis of lesions difficult to detect