



# Clinical presentation ESIM, 4-10 July 2010

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# Case introduction

**J. D. 35 yrs, male**

**Chief complaint:** tarry black stools, abdominal pain, fatigue; weight loss (10kg/1 month)

- **Regional centre:** - 2 episodes/1month,  
- EGDS and colonoscopy: negative

**PMH:** peptic ulcer 10 yrs ago, alcohol consumption, depression 3-4 yrs

**Ph.exam:** normal

**Rectal exam:** melena



# Laboratory examination

- Hgb 115g/L, Hct 0.33 L/L, MCV 84 fL, Fe 12.4  $\mu\text{mol/L}$ ,  
TIBC 66.1  $\mu\text{mol/L}$ , ferritin 121  $\mu\text{g/L}$
- FT4, TSH - normal
- CEA, CA 19-9 - normal

## Stool tests

- occult blood - positive
- ova, parasites - negative
- culture - negative



# Diferential diagnosis

## Upper bleeding:

- Peptic ulcer
- Gastroduodenal erosiones
- Esophagitis and esophageal ulcer
- Varices
- Mallory-Weiss tears
- Vascular malformations
- Tumors
- Drugs (NSAIDs, aspirin...)

## Small-Bowel bleeding:

- Angiodysplasia
- Tumors
- Other (NSAIDs, TBC, Crohn's d., Meckel's d., ZE sy. radiation enteritis, vasculitis, jejunal diverticulosis, chr. mesenterial ischemia)

Lower bleeding ?



# Initial Diagnostic

- **Upper endoscopy with enteroscopy:**

- Chronic gastroduodenitis
- Hiatus Hernia

- *PH analyses:*

*antrum and corpus:* superficial nonspecific gastritis of antral region,  
H. pylori neg.

*small intestine:* nonspecific inflammation, without atrophy,  
microorganism were not seen



# Initial diagnostic

- **Colonoscopy with terminal ileoscopy:**
  - Diverticulosis of sigmoid colon (without inflammation)
  - Internal hemorrhoids
- **Abdominal ultrasound:** normal
- **Small Bowel X Ray:** normal



# Further work-up

## ❖ Bleeding of obscure origin !!

... due to persistent bleeding

- **99mTc –pertechnetate:** without signs of bleeding in GI tract
- **Angiography of AMS:** normal (normal vascularisation of small intestine wall without any signs of extravasation, AV malformations and any other vascular lesions)
- **MSCT Angiography:** normal



# Obscure GI Bleeding

## „Overlooked lesions“:

### Upper GI parts :

- Cameron's erosions
- Fundic varices
- Peptic ulcer
- Angiodysplasias
- Dieulafoy's lesions
- GAVE

### Lower GI parts:

- Angiodysplasias
- Tumors



# Obscure GI bleeding

## Small bowel :

- **Vascular lesions:**
  - Angiodysplasias
  - Telangiectasias (ROW)
  - Dieulafoy's
  - Aortoenteric fistulas
  - Small -bowel varices
- **Tumors** (benign, malignant, metastatic)
- **Crohn's disease**
- **Isolated ulcers (NSAIDs)**
- **Ischemic ulcers**
- **ZE sy., vasculitis**
- **Small Bowel diverticula**
  - Meckel's diverticulum
- **Other:** hemobilia, hemosuccus pancreaticus, CMV, Histoplasmosis, TBC



# What next?

- Capsule endoscopy:

*Meckel's diverticulum !!*

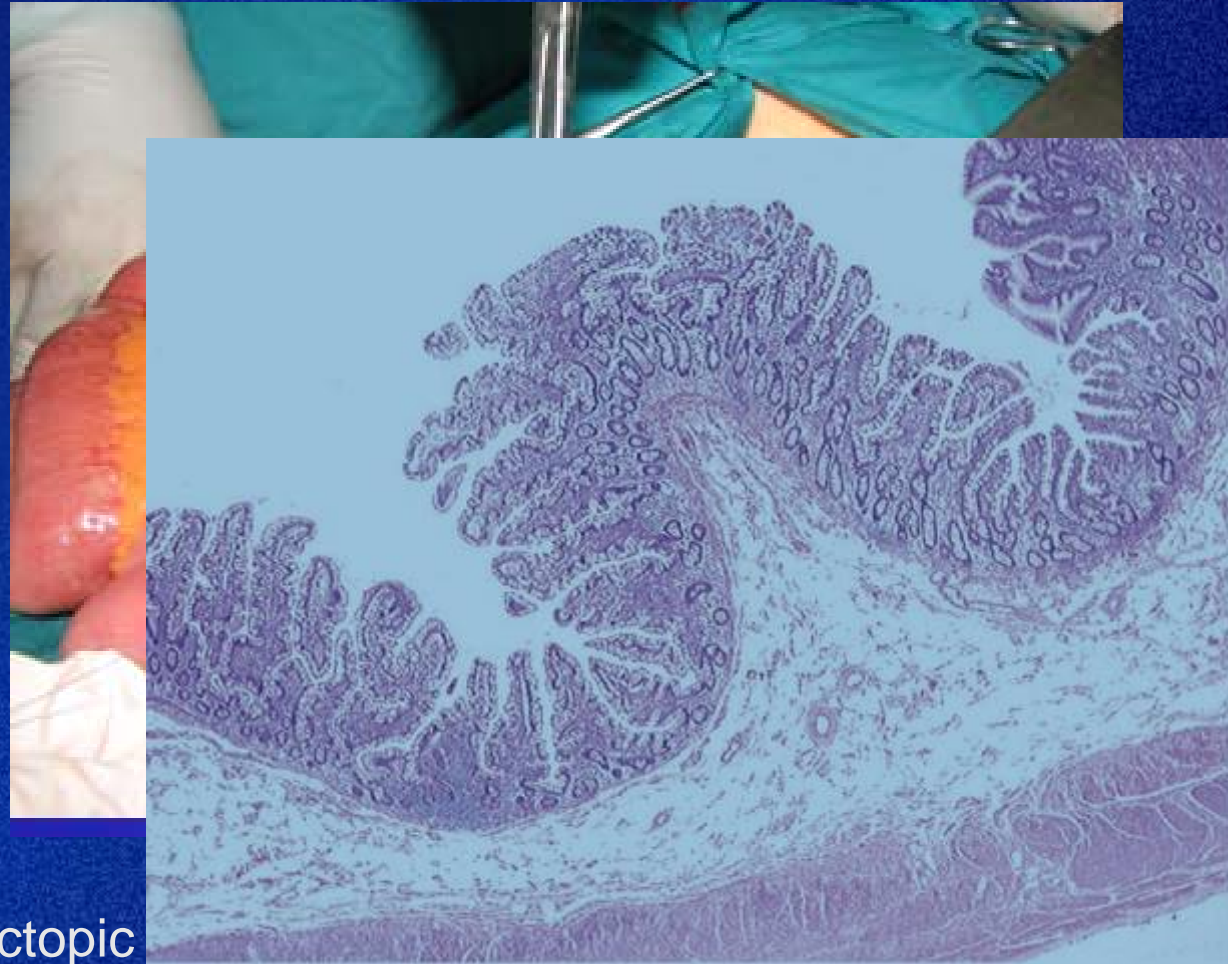


- **Double-balloon enteroscopy:** confirmed Meckel's



# Therapy -Surgery !

- **Medial laparatomy:**



- **PH analysis:** ectopic

# Meckel's diverticulum

- Meckel's diverticulum (MD) is the most common congenital anomaly of GI tract
- Results from persistence of the viteline (omphalomesenteric) duct
- „Rule of 2's” : - 2% of population
  - within 2 feet of the ileocecal valve (anti-mesenteric border)
  - 2 inches in length
  - commonly present around 2 yrs of age ( 60% painless lower GI bleeding)
- Most have ileal mucosa, but may have gastric, duodenal, colonic, biliary or pancreatic
- Most of them are asymptomatic lifelong; usually are discovered incidentally at laparotomy



# Meckel's diverticulum

- Clinical symptoms arise from complications: bleeding (painless rectal, massive is possible), diverticulitis, perforation, obstruction- which are very rare
- MD is a rare cause of gastrointestinal bleeding (GIB) in adults
- Diagnosis:
  - 99m Tc pertechnetate
  - Preoperative diagnosis of MD in older age is a clinical challenge due to decreased sensitivity of Meckel's scan in adults
- Treatment: surgery
- ❖ We suggest that MD should be considered in differential diagnosis of obscure GI bleeding even in elderly patients



Thank You!!!

