Intestinal pathology part 5

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Appendix

- Normal true diverticulum of the cecum

Normal outpouching of the cecum

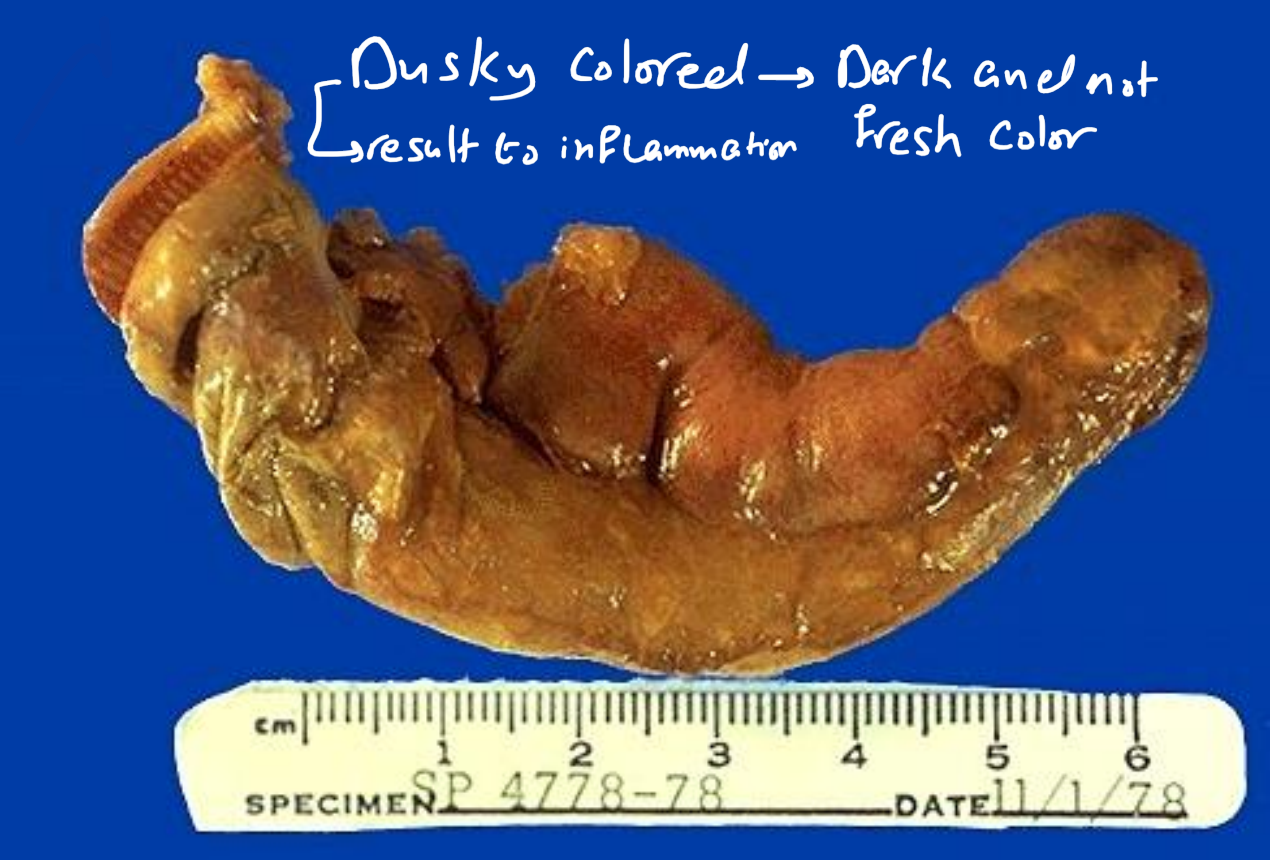
Diseases:

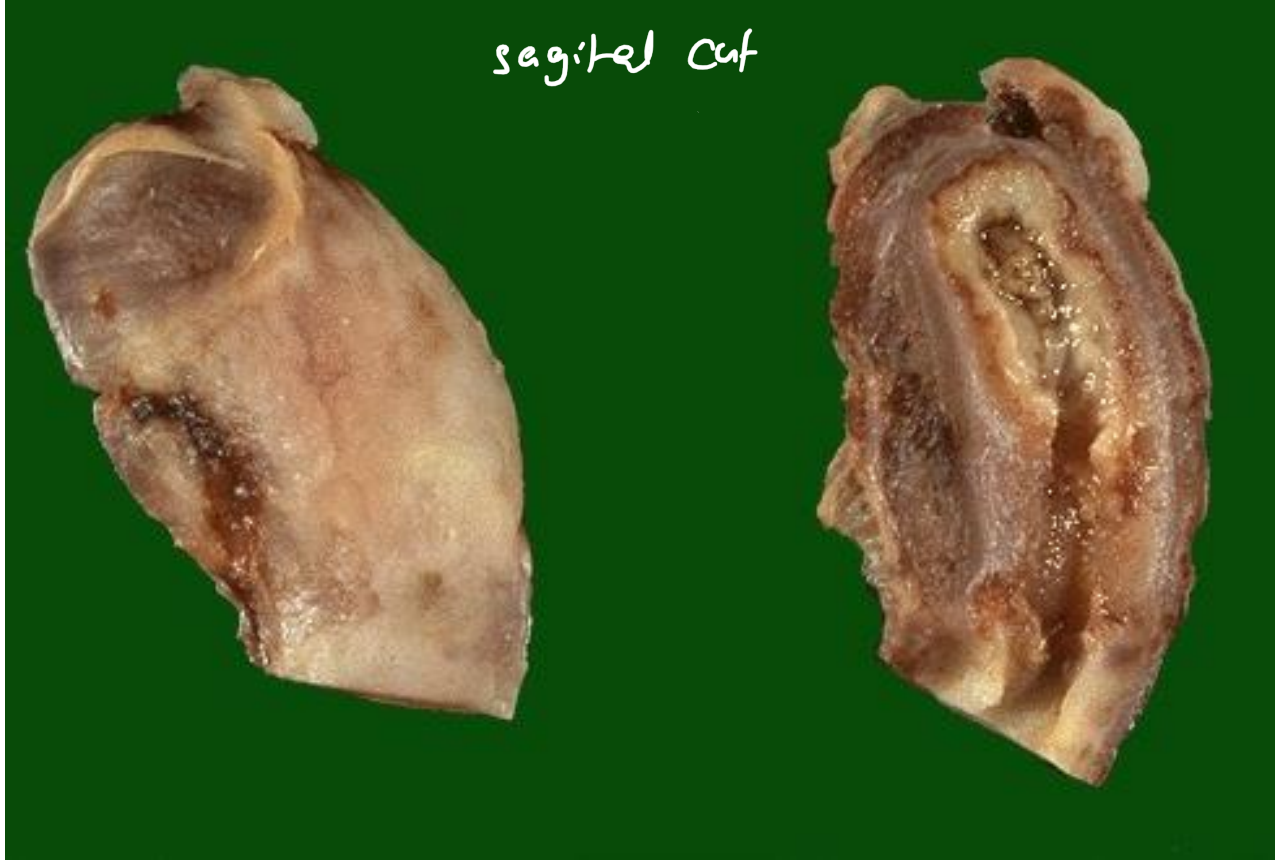
- ACUTE APPENDICITIS
- TUMORS OF THE APPENDIX

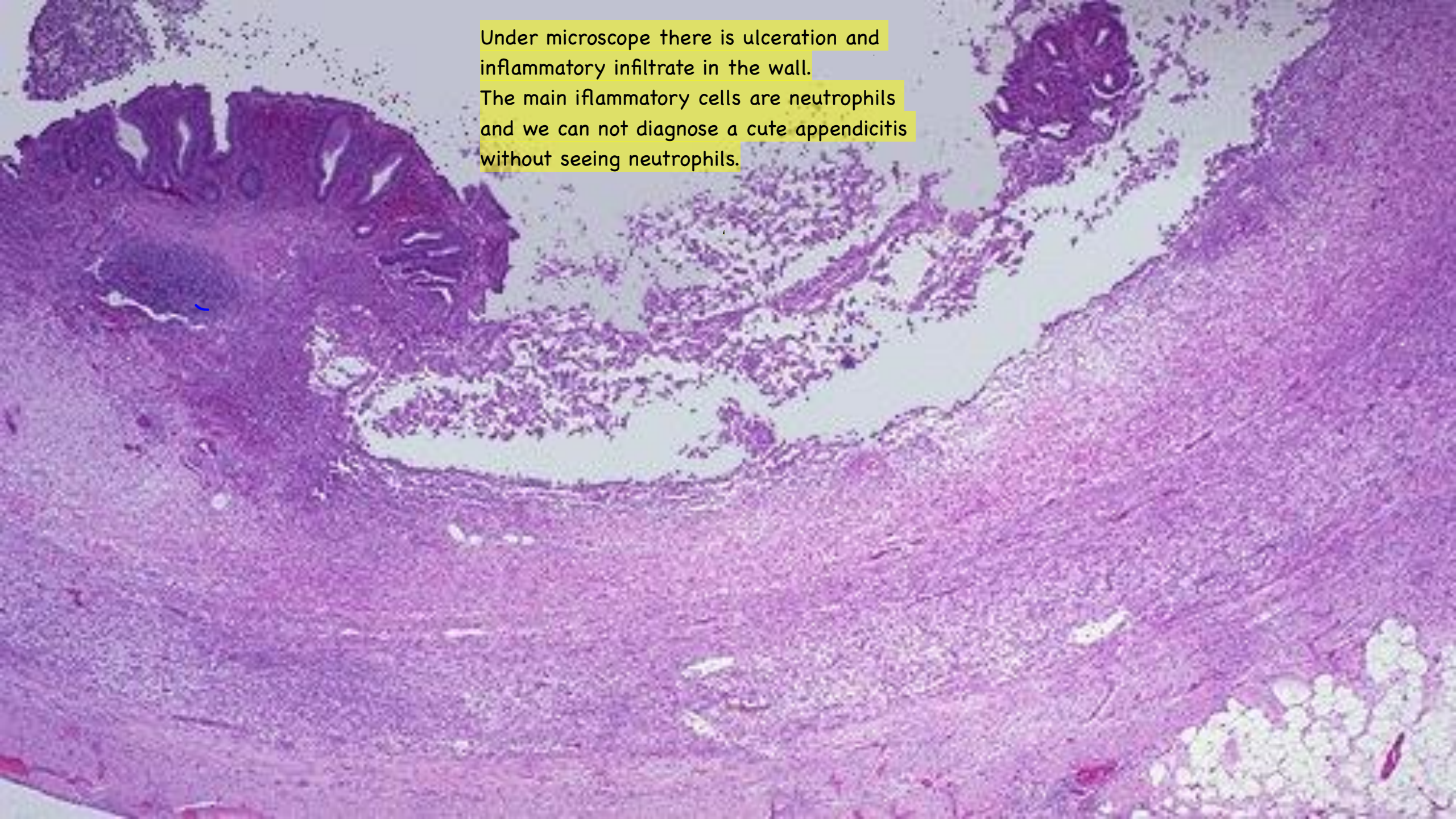
ACUTE APPENDICITIS

- Most common in adolescents and young adults.
- May occur in any age.
- Difficult to confirm preoperatively, surgical emergency.

But when having it in extremeties we should looking for underlying cause


Dusky Colored → Dark and not
result to inflammation
Fresh Color
cm
1
2
3
4
5
6
SPECIMEN SP 4778-78
DATE 11/1/78


sagital cut


Under microscope there is ulceration and
inflammatory infiltrate in the wall.
The main iflammatory cells are neutrophils
and we can not diagnose a cute appendicitis
without seeing neutrophils.

#

≈ 3:20

DDx of acute appendicitis:

Patient come to hospital with abdominal pain.

Before we say that this is a cute appendicitis,
we have to exclude other causes:

- Mesenteric lymphadenitis,
- Acute salpingitis,
- Ectopic pregnancy,
- Mittelschmerz (pain associated with ovulation),
- Ovarian cysts torsion
- Rupture Meckel diverticulitis
- Crohn disease.

Patients come with diarrhea, upperrespiratory symptoms,vomiting with enlarge lymph nodes in the abdomen that can simulate acute appendicitis features, and that's common in children

Inflammation on terminal ileum, ileocecal valve and the cecum

- Luminal obstruction in 50-80% of cases >> increased luminal pressure >> impaired venous drainage >> ischemic injury & stasis associated bacterial proliferation >>> inflammatory response rich in neutrophils & edema.

We Should see neutrophilic infiltration to diagnose a cute appendicitis.

Causes:

- *Obstruction by fecalith, less commonly : gallstone, tumor, worms….*

- Diagnosis requires neutrophilic infiltration of the muscularis propria

Forms:

- **Acute suppurative appendicitis >> more severe >> focal abscess formation.**
- **Acute gangrenous appendicitis >> necrosis and ulceration.** The most severe form

Clinical Features

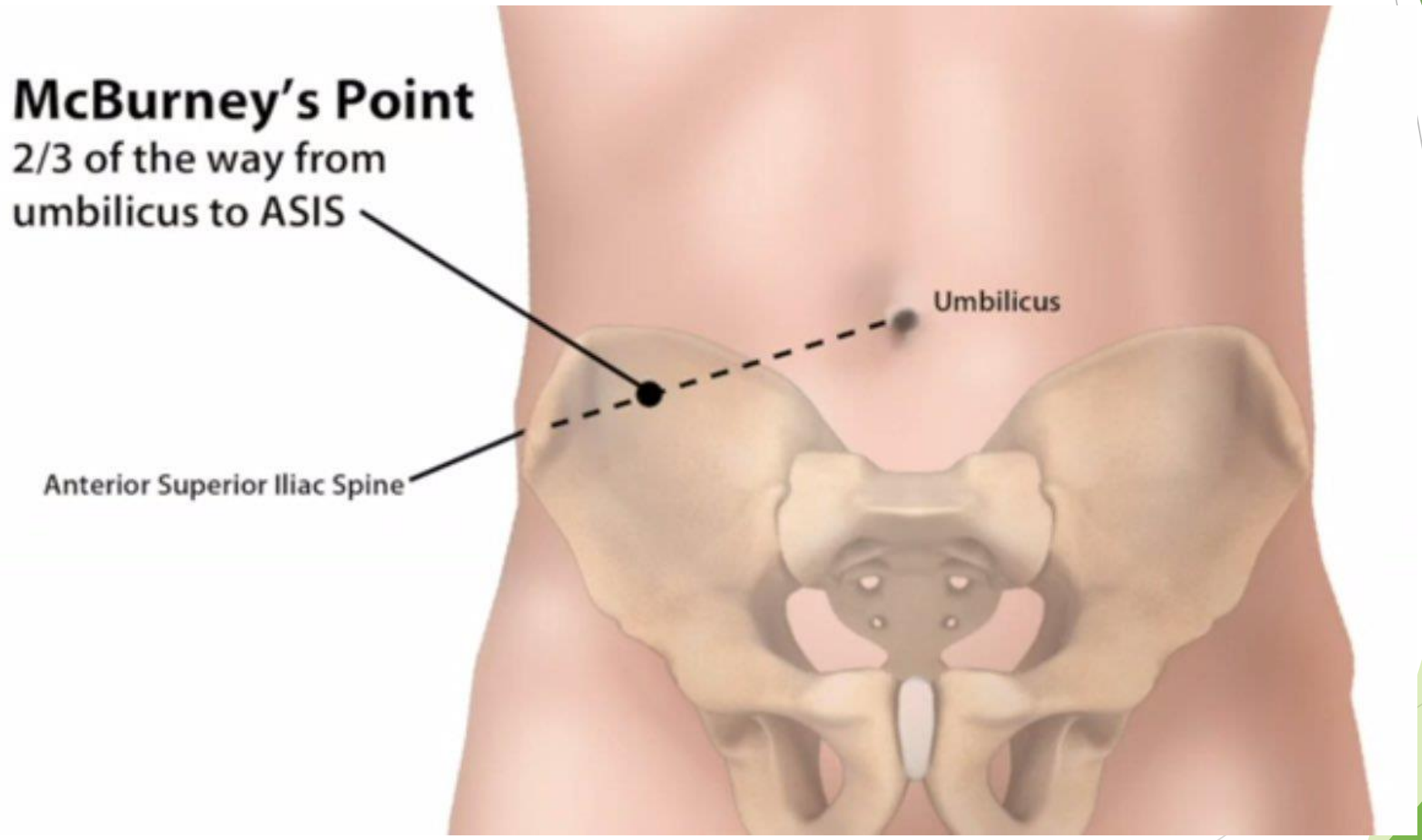
Patient may come with symptoms other than lower right quadrant, abdominal pain.

- Early acute appendicitis: periumbilical pain
- Later: pain localizes to the right lower quadrant,

May be associated with:

- Nausea, vomiting, low-grade fever, mildly leukocytosis.
- A classic physical finding is *McBurney's sign* (McBurney's point).
- Signs and symptoms are often absent, creating difficulty in clinical diagnosis.

The doctor presses at McBurny's point deeply then releases the pressure-->patient will complains of pain after releasing the pressure


McBurney's Point
2/3 of the way from
umbilicus to ASIS
Umbilicus
Anterior Superior Iliac Spine

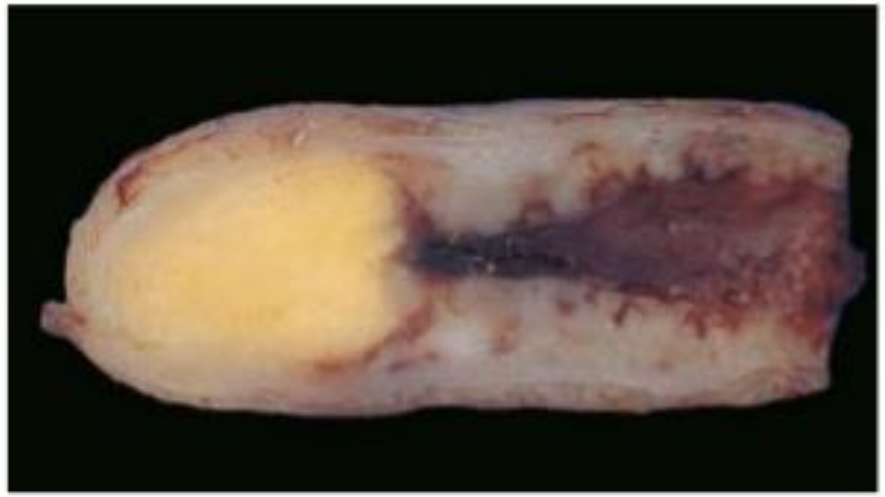
TUMORS OF THE APPENDIX

Most time they occur incidentally, on the top of appendicitis.

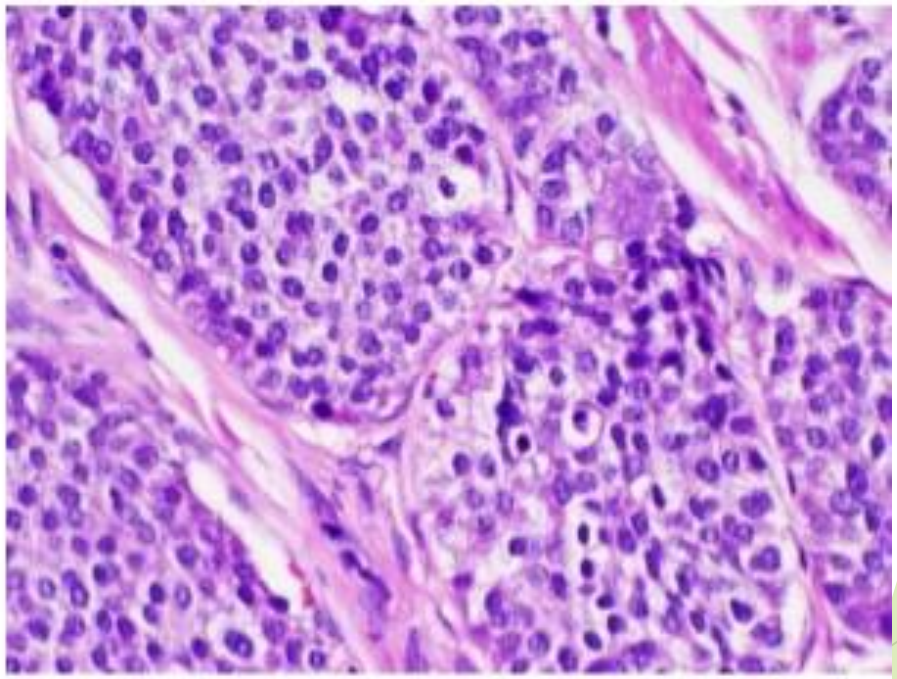
- **The most common tumor: *carcinoid* (neuroendocrine tumor)**
- Incidentally found during surgery or on examination of a resected appendix
- Distal tip of the appendix
- Nodal metastases & distant spread are rare.

Carcinoid tumor

Yellow in color, well circumscribed
the tip of the appendix



Gross



Microscopic

Meckel's diverticulum

Meckel's diverticulum

Patient will born with that anomaly, then it may inflammated, secretes acids then cause ulceration, perforation.

- The most common congenital anomaly of the GI tract
- True diverticulum.
- **Remember (rule of 2):** Because it affect 2% of population.
- About 2% of people have them;
- Located 2 feet from the ileocecal valve.

Patient comes with symptoms similar to acute appendicitis symptoms.
When you do the surgery, you will see normal appendix.

★

The following questions are answered, you can see the answers on the file that is uploaded on "JU medicine".

You can see the record to know what the docotor said about them also.

I'm sorry, but I don't have time to do that😅

دعواتي معكم❤️

ادعولي🫶

- A 50-year-old man has had persistent nausea for 5 years with occasional vomiting. On physical examination there are no abnormal findings. He undergoes upper GI endoscopy, and a small area of gastric fundal mucosa has loss of rugal folds. Biopsies are taken and microscopically reveal well-differentiated adenocarcinoma confined to the mucosa. An upper GI endoscopy performed 5 years previously showed a pattern of gastritis and microscopically there was chronic inflammation with the presence of. Which of the following is the most likely risk factor for his neoplasm?
- A Inherited APC gene mutation
- B *Helicobacter pylori* infection
- C Chronic alcohol abuse
- D Use of non-steroidal anti-inflammatory drugs
- E Vitamin B12 deficiency

- 58-year-old man has had increasing difficulty swallowing for the past 6 months and has lost 5 kg. No abnormal physical examination findings are noted. Upper GI endoscopy reveals a nearly circumferential mass with overlying ulceration in the mid esophageal region. Biopsy of the mass reveals pink polygonal cells with marked hyperchromatism and pleomorphism. Which of the following is the most likely risk factor for development of his disease?
- A Iron deficiency
- B *Helicobacter pylori* infection
- C Chronic alcohol abuse
- D High fruit diet
- E Zenker diverticulum

- A 45-year-old man has had vague abdominal pain and nausea for the past 3 years. This pain is unrelieved by antacid medications. He has no difficulty swallowing and no heartburn following meals. On physical examination there are no abnormal findings. Upper GI endoscopy reveals antral mucosal erythema, but no ulcerations or masses. Biopsies are taken, and microscopically there is a chronic non-specific gastritis. Which of the following conditions is most likely to be present in this man?
- A Zollinger-Ellison syndrome
- B Pernicious anemia
- C *Helicobacter pylori* infection
- D Adenocarcinoma
- E Crohn disease
- F Mixed connective tissue disease

- A 25-year-old man has noted cramping abdominal pain for the past week associated with fever and low-volume diarrhea. On physical examination, there is right lower quadrant tenderness. Bowel sounds are present. His stool is positive for occult blood. A colonoscopy reveals mucosal edema and ulceration in the ascending colon, but the transverse and descending portions of the colon are not affected. Which of the following microscopic findings is most likely to be present in biopsies from his colon?
- A Crypt abscesses
- B *Entameba histolytica* organisms
- C Adenocarcinoma
- D Band-like mucosal fibrosis
- E Non-caseating granulomas
- F Necrotizing vasculitis

- A 32-year-old woman has a 10 year history of intermittent, bloody diarrhea. She has no other major medical problems. On physical examination there are no lesions palpable on digital rectal examination, but a stool sample is positive for occult blood. Colonoscopy reveals a friable, erythematous mucosa with focal ulceration that extends from the rectum to the mid-transverse colon. Biopsies are taken and all reveal mucosal acute and chronic inflammation with crypt distortion, occasional crypt abscesses, and superficial mucosal ulceration. This patient is at greatest risk for development of which of the following conditions?
- A Acute pancreatitis
- B Diverticulitis
- C Sclerosing cholangitis
- D Appendicitis
- E Perirectal fistula
- F Non-Hodgkin lymphoma

- A 20-year-old man is healthy but has a family history of colon cancer with onset at a young age. There are no abnormal physical examination findings. He undergoes colonoscopy and there are over 200 tubular adenomas ranging in size from 0.2 to 1 cm on gross inspection and microscopic examination of biopsies. Which of the following genetic diseases is he most likely to have?
- A Hereditary non-polyposis colon carcinoma syndrome
- B Peutz-Jeghers syndrome
- C Adenomatous polyposis coli
- D Multiple endocrine neoplasia

- A 25-year-old man complains of a low volume but chronic, foul smelling diarrhea for the past year. He has no nausea or vomiting. On physical examination there is no abdominal pain or masses and bowel sounds are present. His stool is negative for occult blood. Laboratory studies include a quantitative stool fat of 10 g/day. Upper GI endoscopy is performed with biopsies taken of the duodenum, and on microscopic examination show absence of villi, increased surface intraepithelial lymphocytes, and hyperplastic appearing crypts. Which of the following therapies is most likely to be useful for this man?
- A Antibiotics
- B Gluten-free diet
- C Selective vagotomy
- D Corticosteroids
- E Segmental duodenal resection
- F Aromatherapy

- A 51-year-old man undergoes routine health examination by his nurse practitioner. There are no abnormal physical examination findings except for a stool sample positive for occult blood. Colonoscopy is performed and there is a 1 cm polyp on a narrow stalk located in the descending colon at 30 cm from the anal verge. The polyp is resected and on microscopic examination shows crowded, tubular, atypical colonic-type glands. The stalk of the polyp is covered with normal colonic epithelium. Which of the following is the most likely diagnosis?
- A Adenomatous polyp
- B Inflammatory fibroid polyp
- C Peutz-Jeghers polyp
- D Ulcerative colitis pseudopolyp
- E Hyperplastic polyp
- F Crohn disease