

**ILLNESSES With
SYMPTOMS of
ENTEROCOLITIS
(WITHOUT VOMITING
AND BLOOD IN FECES)**

- ✓ *Many infectious diseases are included in this group, in particular, salmonellosis (gastroenteritic form), shigellosis and esherichiosis.*
- ✓ *Enterocolitis can be at yersiniosis, campylobacteriosis, sometimes at a leptospirosis, rotaviral and some other illnesses.*

□ **Salmonellosis, shigellosis and esherichiosis** can develop both as gastrointestinal forms and as colitic. Principles of differential diagnostics are same.

- 1) Salmonellosis is characterized by more expressed and protracted intoxication.
- 2) Esherichiosis develops most easily.
- 3) Shigellosis occupies intermediate position.
- 4) At salmonellosis all departments of bowel are damaged.
- 5) At shigellosis and esherichiosis only distal departments of bowel are damaged.
- 6) Clinical differentiating of mild forms is impossible.
- 7) Bacteriologic examination and epidemiological situation decide a question.

□ **Yersiniosis.**

- 1) Yersiniosis develops with diarrhea that is present at gastroenterocolitic and appendicular forms of illness. There can be signs of mesadenitis.
- 2) Nausea and vomiting appear rarely, admixture of blood in feces presents very rarely.
- 3) A fever (38-39 °C and higher), expressed general intoxication are characteristic.
- 4) Pain is strong, quite often spastic in the lower part of stomach, anymore on the right,.
- 5) There are the expressed signs of appendicitis at the appendicularoñ form.
- 6) Tenesmus, spasm of sigmoid colon and false feeling to defecation are absent.
- 7) A stool is liquid with a fetid smell up to 10 times per day.
- 8) There are neutrophilic leucocytosis ($15 \times 10^9/l$), increase of ESR in blood.
- 9) Laboratory – selection of causative agent from feces (rarely), serological methods – basic (HT and IHT, diagnostic title of 1:160 and higher or growth of title of antibodies in a convalescence).

□ **Campylobacteriosis.**

- 1) Can develop with predominance of signs of both gastroenteritis and enterocolitis.
- 2) For adults it is rare, for the children – often.
- 3) Beginning sharp. The temperature of body is 38-39°.
- 4) Pains are in an epigastric area, sometimes vomiting presents.
- 5) A stool is abundant, liquid, foamy, without the admixtures of mucus and blood.
- 6) The expressed dehydration can develop.
- 7) Sometimes it has chronic development (weakness, asthenic syndrome, mild pyrexia, loss of body mass, loss of appetite, diarrhoeas alternate with constipation).
- 8) Except damages GIT, the damages of organs and systems (conjunctivitis, keratitis, endocarditis, etc.) develop at a chronic development.
- 9) Final diagnosis is put after the selection of causative agent from feces or blood and also serologically (CFR, IHT, reaction of microagglutination).

□ A leptospirosis on occasion can be accompanied by enterocolitis on a background of main clinical manifestations but the last years it is observed rarely.

□ **Gisrdiasis.**

- 1) Usually it develops easily with normal temperature of body.
- 2) There are fever, mildly expressed stomach-aches in epigastric area, rumbling in a stomach and liquid watery stool without the admixtures of mucus and blood sometimes in 10-15 days after contamination.
- 3) Without specific treatment convalescence is in 1-2 months.
- 4) Final diagnosis is put after finding out of lamblias as vegetative forms (in duodenal content and liquid stool) or as cysts (in the formed stool).
- 5) More severe development is possible at combination with other infectious disease.

□ **Rotaviral disease.**

- 1) Children are sick mainly.
- 2) Latent period is short (more often 1-2 days), beginning is sharp.
- 3) A temperature is subfebrile and signs of general intoxication are mildly expressed.
- 4) A stool is abundant liquid watery, without the admixtures of mucus and blood, vomiting is rare.
- 5) The loud rumbling is in a stomach, feeling to defecation has imperative character, tenesmus are absent.
- 6) Sickliness in epigastric and umbilical areas, rough rumbling in a right iliac area.
- 7) Winter season, group character of diseases, negative results of bacteriologic examinations is important.
 - A diagnosis is confirmed by finding of rotaviruses in feces (electronic microscopy, immunofluorescent method and other).

1) **Typhoid fever, paratyphuses A and B.**

- 2) In the period of height it can develop with disorder of stool at more severe development (20%).
- 3) Stool is rifle-green 3-5 times without the expressed pains, tenesmus and false feeling.
- 4) Diagnostics is bacteriological, serological and clinical in the period of height of illness (fever, roseola rash, hepatolienal syndrome and other).

ILLNESSES With SIGNS of COLITIS And With BLOOD In FECES

□ This sign can be observed at the illnesses caused by:

- 1) protozoo (amebiasis, balantidiasis),
- 2) bacteria (shigellosis, campylobacteriosis, salmonellosis, escherichiosis),
- 3) Clostridial **pseudomembranous colitis**,
- 4) helminths (schistosomiasis, ankylostomiasis),

□ by uninfectious illnesses:

- 1) ulcerative colitis,
- 2) Cron disease,
- 3) tumor of bowel,
- 4) diverticulosis,
- 5) pellagra and other.

□ Clostridial pseudomembranous colitis.

- 1) Illness is conditioned by excessive reproduction of *Clostridium difficile*.
- 2) Observed at the dysbacteriosis, conditioned by the protracted (from 1 to 6 нед.) application of antibiotics of wide spectrum of action (clindamycin, ampicillin, cefalosporins, aminoglycosides).
- 3) Sharp beginning, fever, diarrhea - abundant liquid watery greenish stool with a strong putrid smell and admixture of blood.
- 4) Hypovolemic shock, hemorrhagic syndrome is possible.
- 5) Toxic expansion of colon and perforation of blind gut are a complication.
- 6) At palpation a spasm and sickliness of thick bowels are marked.
- 7) RRS: hyperemia, edema and mild vulnerability of mucous membrane, surface grainy, hemorrhages and mucous pseudomembranes are marked, increase of peristalsis.
- 8) Without adequate treatment death of patient is possible.
- 9) About 5% of healthy people are carriers of **Clostridia** .
- 10) Improvement after abolition of antibiotics and using of metronidazol has diagnostic value.

□ Amebiasis.

- 1) Widespread in countries with a hot climate.
- 2) A maximum of diseases is on August.
- 3) Latent period protracted (more often 36 weeks.).
- 4) Illness begins sharply: a general weakness, headache, mildly expressed stomach-aches, temperature of body is subfebrile.
- 5) Then diarrhea with admixture of glassy mucus and blood appears.
- 6) The stool of type of «raspberry jelly» is rare.
- 7) There is the expressed sickliness in area of blind and ascending gut at palpation.
- 8) Unlike the shigellosis intoxication is mild and duration of intestinal disorders is prolonged.
- 9) Admixture of blood in the stool presents at more severe forms of illness.
- 10) Without antiameba therapy chronic form with recrudescence development comes after short remission.
- 11) Quite often there are extraenteric complications (amebian liver or lung abscesses and other).
- 12) RRS: in the period of intestinal disorders ulcerous changes of mucous membrane different age (unlike shigellosis) is characteristic.
- 13) Laboratory test is discovery of large vegetative (tissue) form of amoeba with the phagocytized RBC.
 - Feces for an analysis has to be «in a warm kind» (during 20 min after defecation).
 - Serological tests have small diagnostic value.

□ **Balantidiasis.**

- 1) Protozoan illness like amebiasis with ulcerous damage of colon.
- 2) Without treatment lethality is about 10%.
- 3) Meets sporadically, after contact with pigs.
- 4) Begins sharply with the signs of general intoxication: weakness, headache, loss of appetite, fever.
- 5) Damage of bowels manifests by stomach-aches, flatulence, diarrhea, tenesmuses.
- 6) Feces is liquid, with the admixture of mucus and blood, up to 20 times with a putrid smell.
- 7) At palpation: induration, compression, spasm and sickliness of colon.
- 8) A liver is enlarged and painful.
- 9) RRS: focal inflammatory changes and ulcers of bowel.
- 10) Patients lose weight quickly, anaemia develops.
- 11) It is confirmed by finding out of balantidia in feces (warm).

□ **Shigellosis.**

- 1) Short latent period, intoxication syndrome, admixture of blood in an excrement at more severe forms with the clearly expressed clinic and signs of distal colitis (false feeling, tenesmus, hemorrhagic changes at RRS of and other), a neutrophilic leucocytosis is in blood.
- 2) A clinical diagnosis is not difficult.
- 3) Laboratory confirmation is bacteriological, serological.

□ **Salmonellosis.**

- 1) Colitic the form of illness develops with high and more protracted intoxication, fever (4-5 days), the admixture of blood in a stool is marked at 15-20% of patients.
- 2) Sometimes – hepatosplenomegaly.
- 3) All parts of colon are damaged.
- 4) RRS – changes similar with shigellosis.
- 5) In blood - neutrophilic leucocytosis (sometimes is leucopenia).
- 6) Laboratory confirmation is bacteriological, serological.

□ **Esherichiosis.**

- 1) Colitic form of esherichiosis is rarely accompanied with blood in stool.
- 2) It is clinically difficult to distinguish shigellosis at mild form.

□ **Campylobacteriosis.**



- 1) **Clinically** – watery foamy stool, sometimes with the admixture of mucus and blood.
- 2) Feces more abundant, than at shigellosis, colitic forms of salmonellosis and escherichiosis.
- 3) Syndromes of general intoxication and dehydration are more expressed, that is not characteristically for the colitic forms of bacillosis.
- 4) More often it develops at children.
- 5) It is confirmed by specific laboratory researches.

□ **Ankylostomiasis.**

- 1) Includes two helminths: ancylostomiasis and necatoriasis with same clinic.
- 2) Widespread in countries with a moist tropical and subtropical climate.
- 3) Eggs and larvae of helminths are protractedly saved in an environment (in soil).
- 4) Gets to the organism perorally or percutaneously (dermatitis, itch, edema of tissue, erythema, papulo-vesicular elements).
- 5) At the early phase (migration of larvae): dry cough, attacks of difficulty in breathing, eosinophylic infiltration in lungs, eosinophilia in blood (up to 30-60%).
- 6) Stomach-aches appear, diarrhea at part of patients with the admixture of mucus and blood is possible.
- 7) Epidemoiological anamnesis (being in precinctive districts) is important.
- 8) Confirmed by finding out the eggs of helminths in feces.

□ **Schistosomiasis.**

- 1) Some forms of schistosomiasis (intestinal and Japanese) develop with the damage of colon.
- 2) Widespread in the countries of Africa, Asia and South America.
- 3) Contamination at bathing in freshwater reservoirs, during that the larvae of helminth (cercaria) penetrate skin.
- 4) The sharp stage of intestinal schistosomiasis develops during 3 months after an invasion.
- 5) Cough with a sputum, shortness of breath, mild enlargement of liver and spleen are typical.
- 6) Fever, loss of appetite, frequent liquid stool with the admixture of mucus and blood tenesmuses, for some patients – nausea and vomiting; expressed eosinophilia present.

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- 7) In a chronic period – damage of organs of digestion (mainly distal departments of colon), considerable increase of liver and spleen (portal hypertension).
 - 8) At severe form shigellosis-like syndrom: frequent stool with the admixture of mucus and blood, tenesmus, in the period of remission constipation is more often.
 - 9) RRS – inflammatory changes: hyperemia of mucous membrane, hemorrhagic changes, ulcers, polypuses.
 - 10) Clinical data (increase of liver and spleen, eosinophilia, protracted development) is important.
 - 11) Confirmation of diagnosis by discovery of eggs of helmint in feces or in tissue of bowel (biopsy); serological tests (CFR, ELISA) have a small diagnostic value.

❑ **Uninfectious illnesses with enterorrhagias** (inflammation is limited by the mucous membrane and carries diffuse character).

❑ **Ulcerative colitis (UC).**

- 1) Chronic disease of colon, is characterized by immune inflammation of mucous membrane.
- 2) Strikes ONLY a colon and never spreads to the thin bowel. (An exception is retrograde ileitis) with the obligatory involving of rectum.
- 3) The sharp shigellosis-like syndromat beginning can be present.
- 4) In future the protracted progressive development – diarrhea, tenesmus and false feeling to defecation, stomach-aches.
- 5) Mass of body goes down, the temperature of body rises mildly, anaemia develops.
- 6) Diagnostics – X-ray, RRS, FCS.


□ **Cron disease (CD).**

- 1) chronic recrudescence disease of GIT unknown etiology, characterized by transmural segmental granulomatous inflammation with development of local and system complications.
- 2) Often - at persons in age 15-21.
- 3) Stomach-aches, diarrhea, loss of mass of body, fever and rectal bleeding.
- 4) Clinically similar with UC.
- 5) Quite often – different extraenteric manifestations (arthritises, erythema nodosum, gangrenous pyoderma, stomatitis and ulcers in the cavity of mouth).
- 6) The anal fissure, rectal fistulas can develop.
 - For diagnostics X-ray, FCS and histological researches are used.
- 1) NT, CT.

Roentgenologically:

- a) local irregular damage.
- b) strictures.
- c) “cobblestone road” – tessellated picture with the shallow defects due to an edema and linear ulcers.
- d) Fistulas.
- e) Interintestinal abscesses.
- f) rigidity of the bowel.
- g) “String symptom” (sharp stenosis of iliac bowel) .

- **Laboratory differential diagnostics of UC and CD.**
- **ASCA (antibodies to *Saccharomyces cerevisiae*).**
 - 1) For Crohn disease specificity of ASCA IgG and IgA — 95-100%, sensitiveness — 60-75%.
 - 2) For UC: IgG — 5%, IgA — 7%.
- **aANCA (atypical antineutrophilic cytoplasmic antibodies)**
 - 1) UC — 50-90%,
 - 2) Crohn disease — 10-20%.
- **Combination of ANCA and ASCA does possible a rapid and uninvasion differential diagnosis between CD and UC.**



□ **One of modern markers of diagnostics of inflammatory diseases of bowels is fecal calprotectin -the albumen produced by neutrophils of mucous membrane of bowels (FC).**

- 1) At exacerbation it rises (>100-150).
- 2) It correlates with histological and endoscopic activity.
- 3) A proof enhanceable level of FC shows uneffectiveness of therapy.
- 4) An increase of FC in the dynamics of supervision is probability of exacerbation.

□ **Diverticulosis.**

- 1) **Widely** widespread in the developed countries, often at persons older 50-60 y.o.
- 2) Conditioned by character of feed (protracted deficit of vegetable cellulose).
- 3) Small losses of blood with an excrement or more massive sharp bleeding are periodical.
- 4) Violation of intestinal passableness, formation of fistulas, expansion of colon, perforations of diverticulums, etc. are important for diagnostics.
- 5) X-ray has decision value.

□ **Pellagra.**

- 1) Arises up because of deficit of nicotinic acid, that it contingently the protracted eating with small maintenance of this vitamin or tryptophane.
- 2) Manifestations: diarrhea with the admixture of blood, tenderness of colon at palpation. Illness develops mainly in tropical countries.

✓ **Endometriosis of colon** (sigmoid colon is usually damaged) : pains and enterorrhagias appear only during menstruations.

□ **Tumors of bowel.**

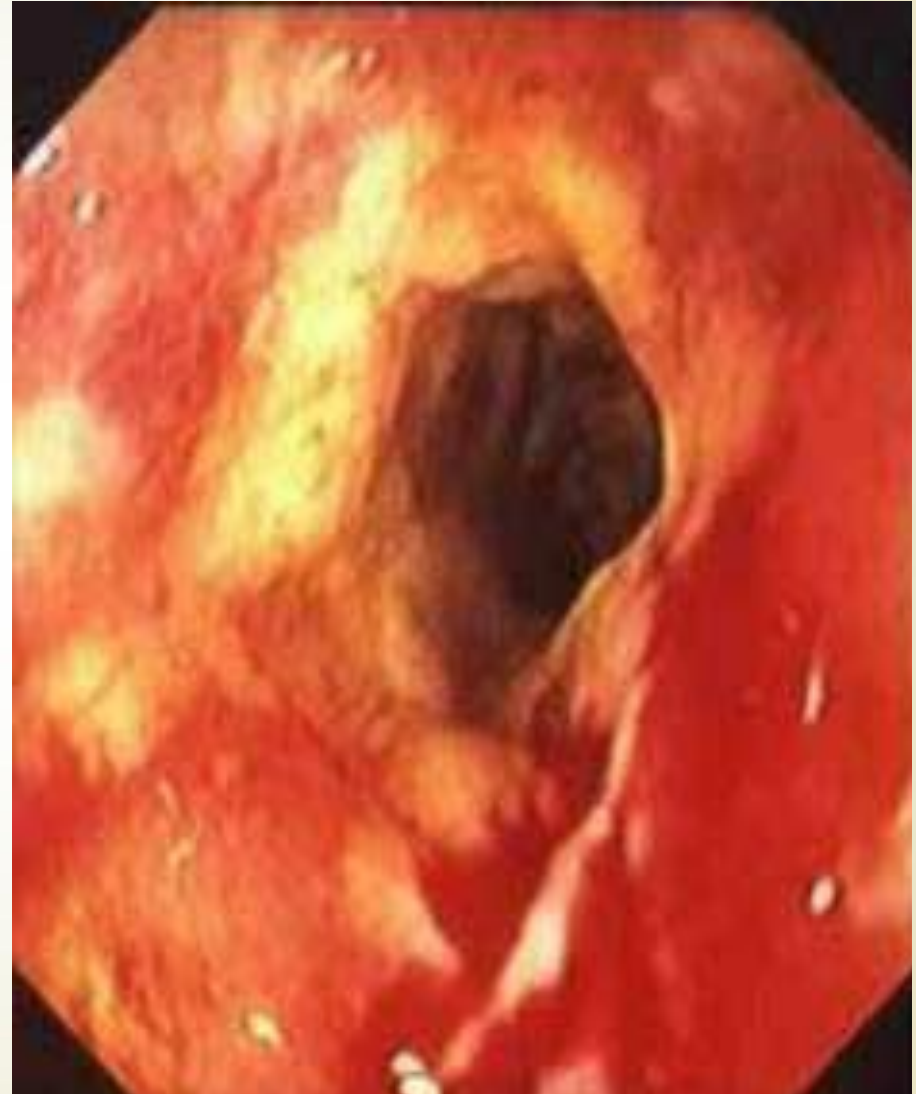
- 1) Develop with enterorrhagias, sometimes – disorders of stool.
- 2) The cancer of colon is more often localized in area of rectum, sigmoid and descending colon. Absence of fever (till the period of necrosis) and expressed intoxication, predominance of bleeding above diarrhea.
- 3) In 50% is revealed at RRS, at higher localizations at FCS and roentgenologic research.
- 4) There can be a malignant lymphadenoma of colon, lymphogranulomatosis of bowels, at that the area of blind gut is more often damaged.

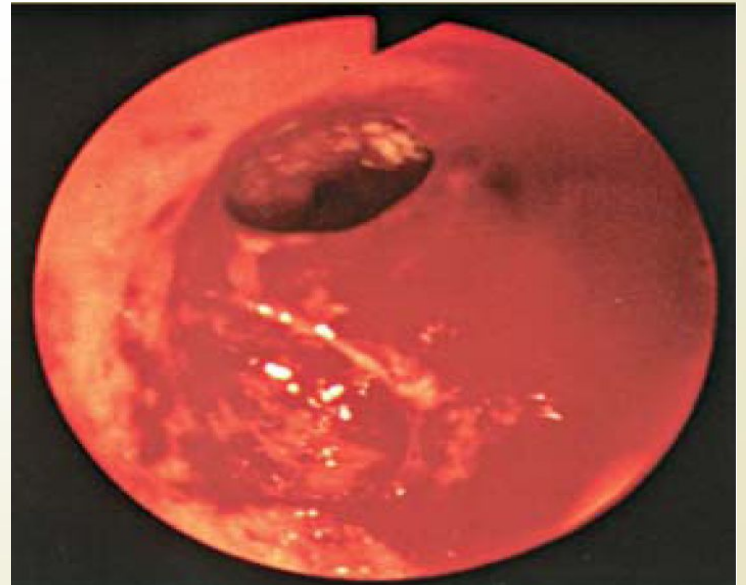
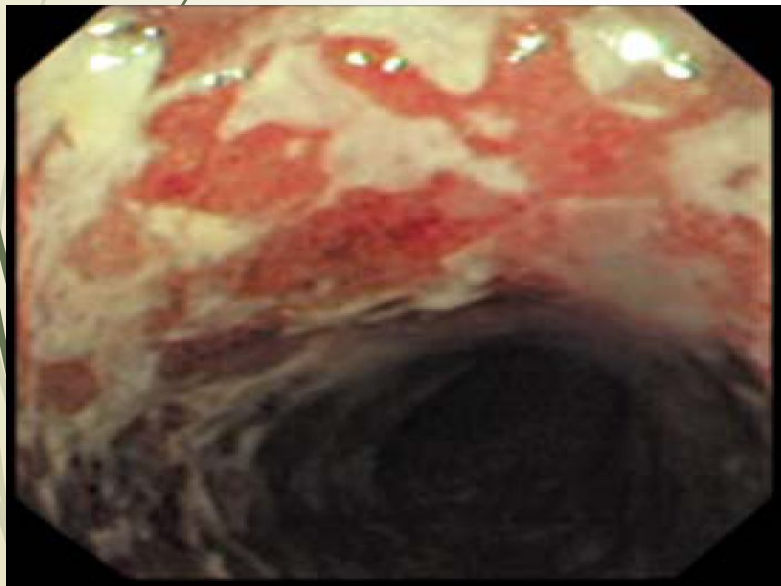
□ **Abdominal syndrome at illness of thrombocytopenic purpura :** stomach-aches, liquid stool with the admixture of mucus and blood.

□ **Rarely other reasons:** tuberculosis of bowels, polyposis, hemangioma and other.

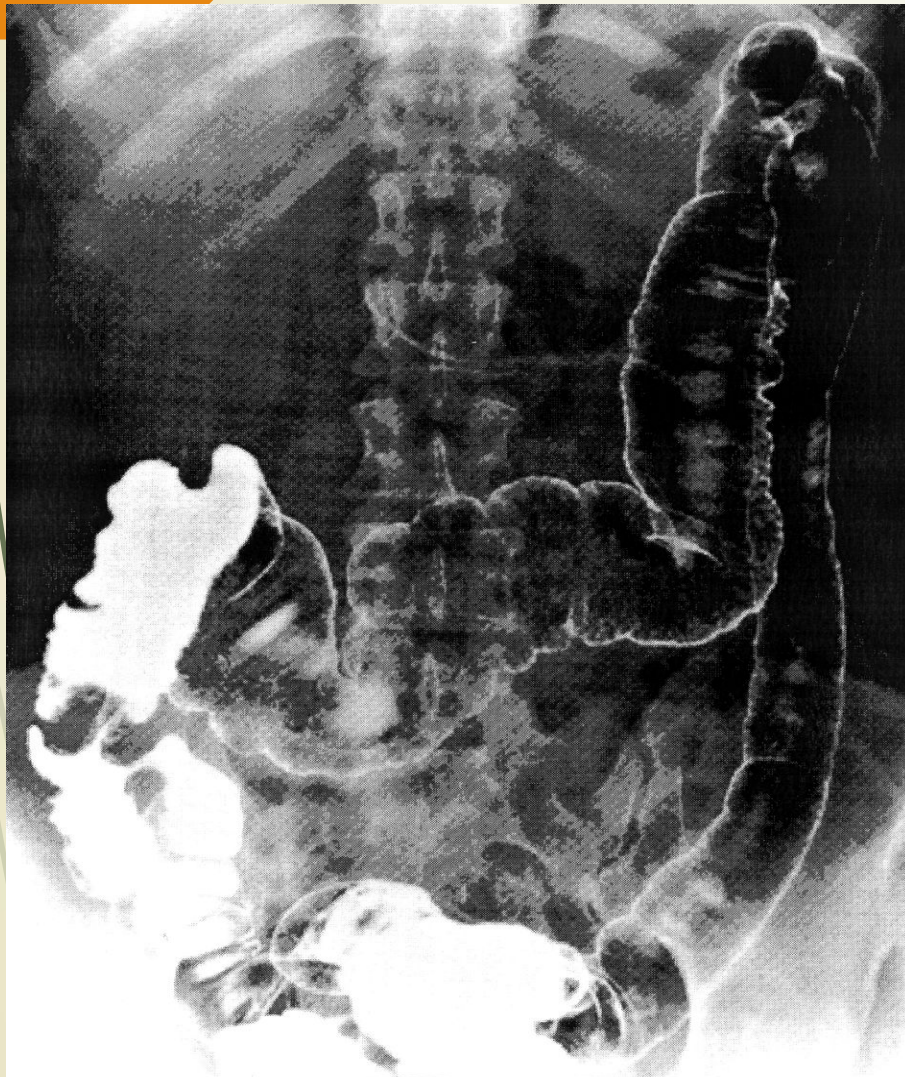
ЭНДОСКОПИЧЕСКИЕ ПРИЗНАКИ НЯК

- 1) Отек, гиперемия слизистой.
- 2) Появление грануляций на ее поверхности,
- 3) Отсутствие сосудистого рисунка.
- 4) Слизистая оболочка легко ранимая, кровоточит.
- 5) Язвы на фоне воспалительно измененной слизистой оболочки покрыты фибрином, гнойным экссудатом.



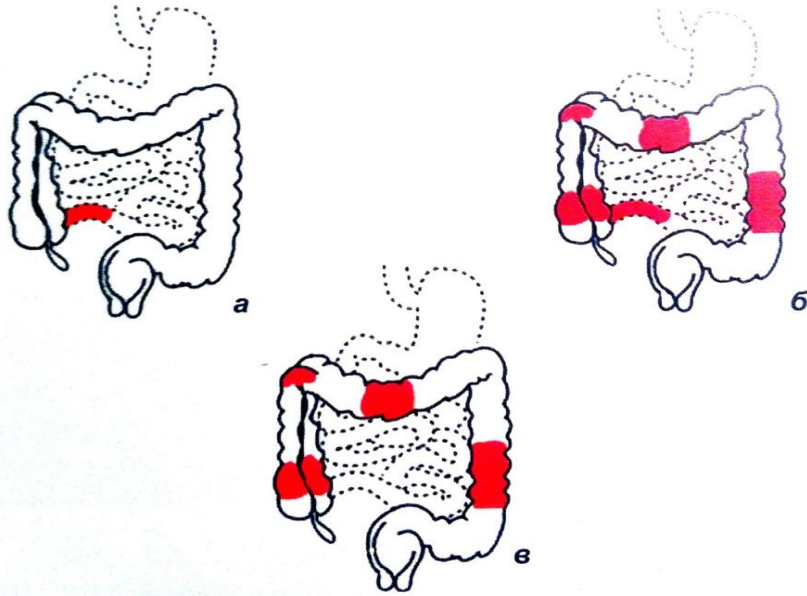


НЯК: Симптом "водосточной трубы". Ирригограмма.



БОЛЕЗНЬ КРОНА

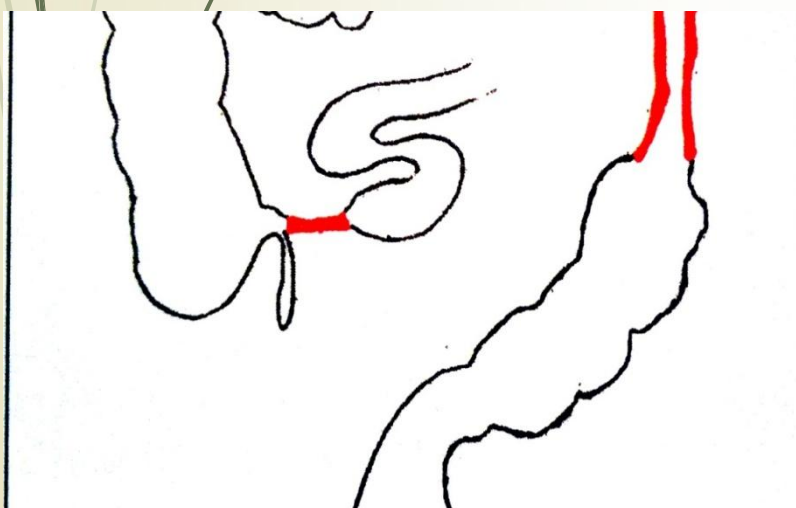
(гранулематозный колит, гранулематозный энтерит)



ТОНКАЯ КИШКА



НОРМА БОЛЕЗНЬ КРОНА



Поражение кишечника,
аноректальной зоны по типу
«чемоданной ручки»



Рис. 1. Афты в ободочной кишке при болезни Крона

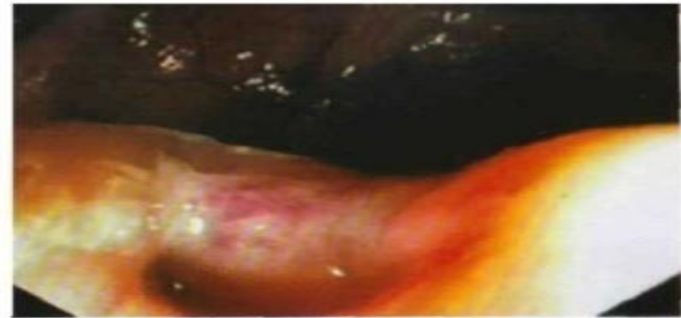


Рис. 2. Болезнь Крона в илеоцекальном клапане

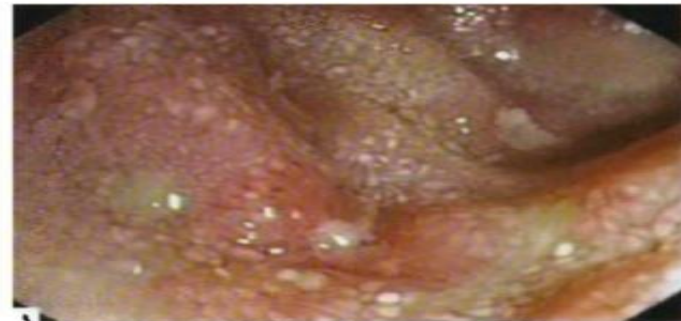


Рис. 3. Болезнь Крона в подвздошной кишке (а, б)



Рис. 4. Воспалительные полипы, язвенный колит

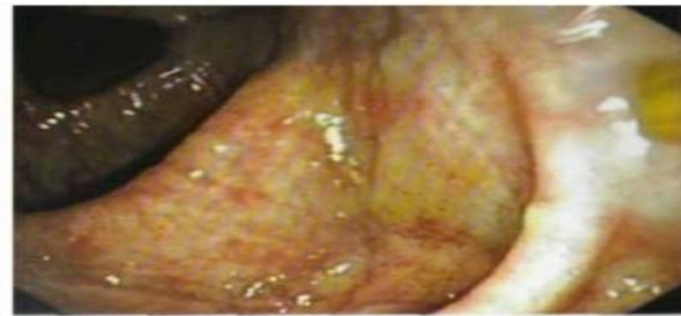
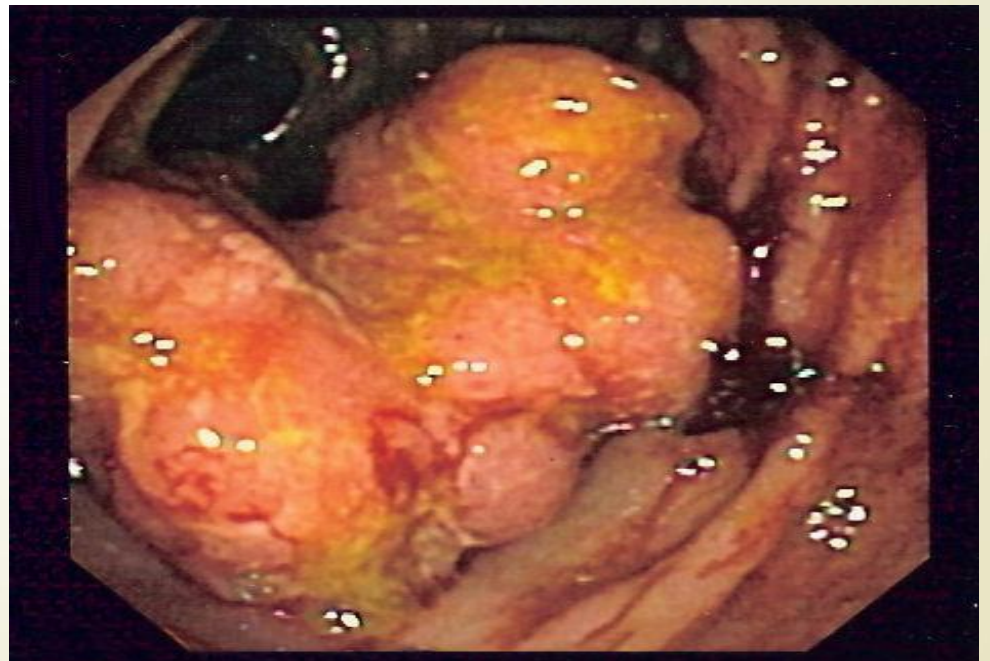
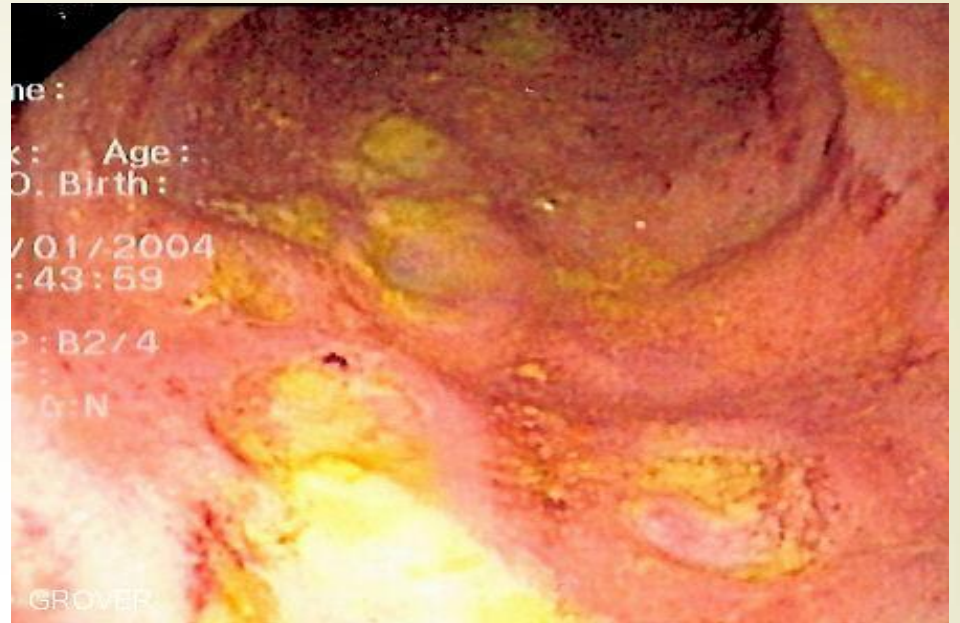
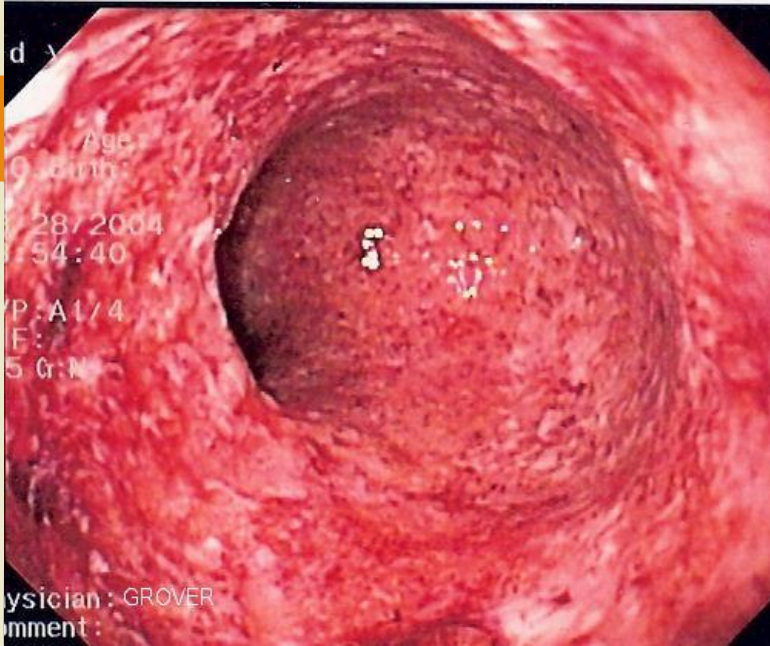
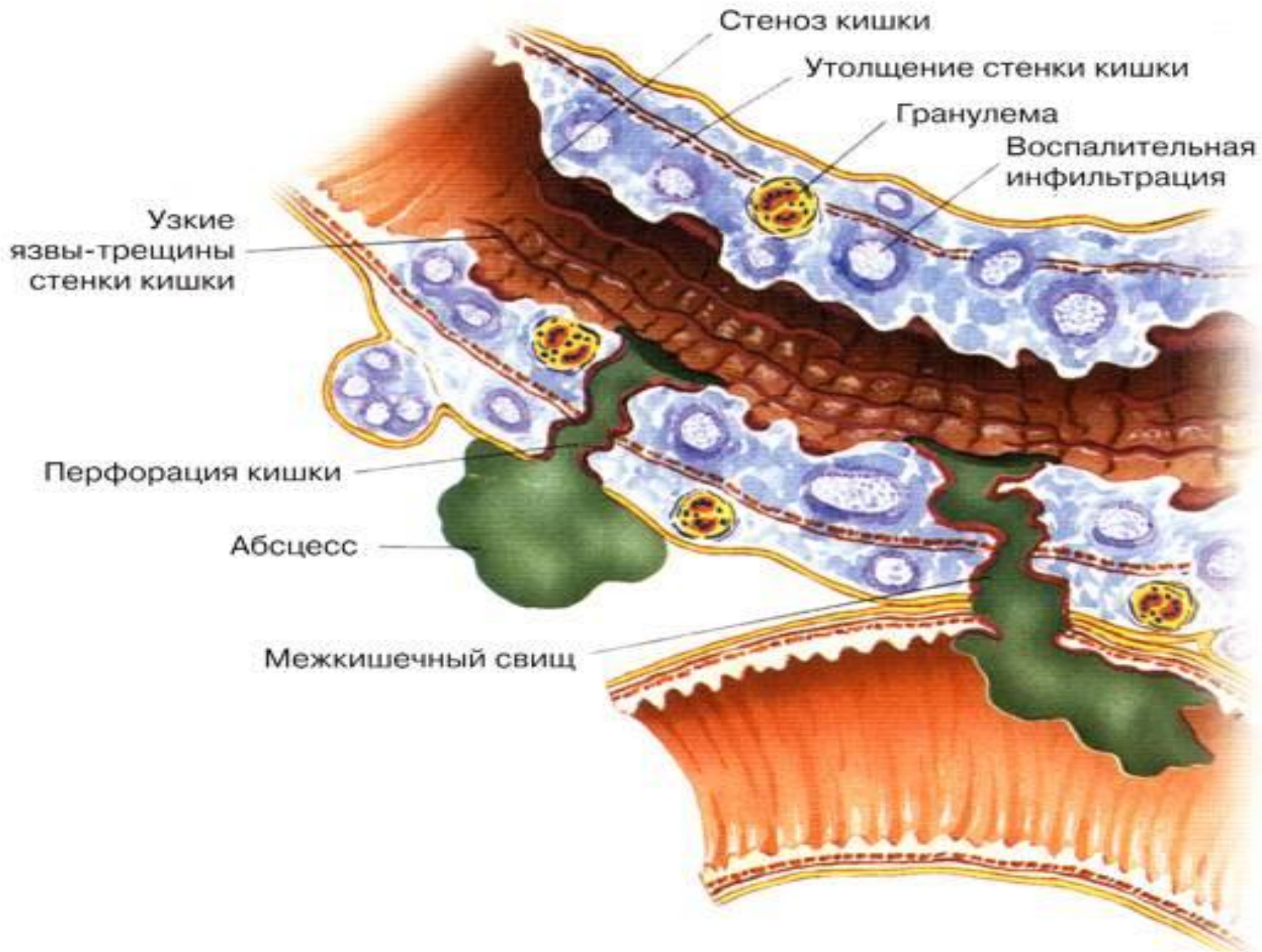


Рис. 5. Рубец после язвенного колита

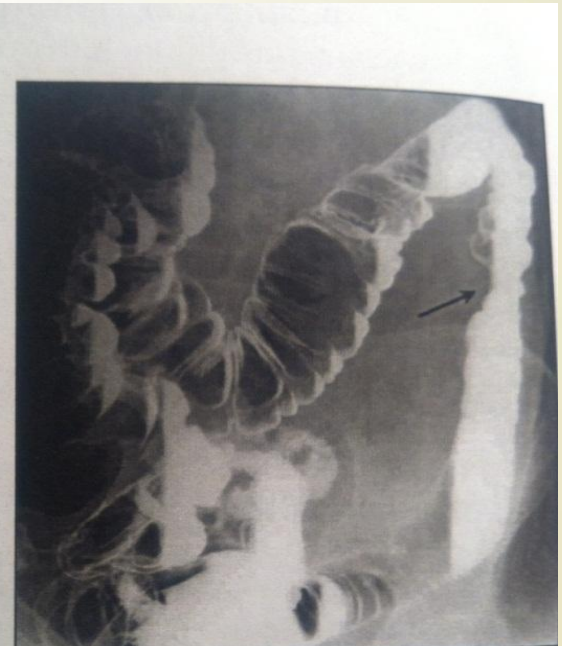


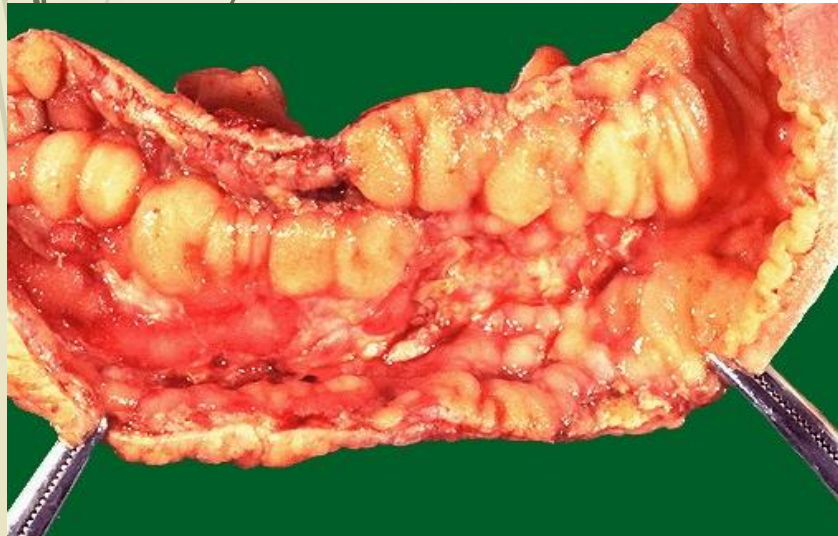
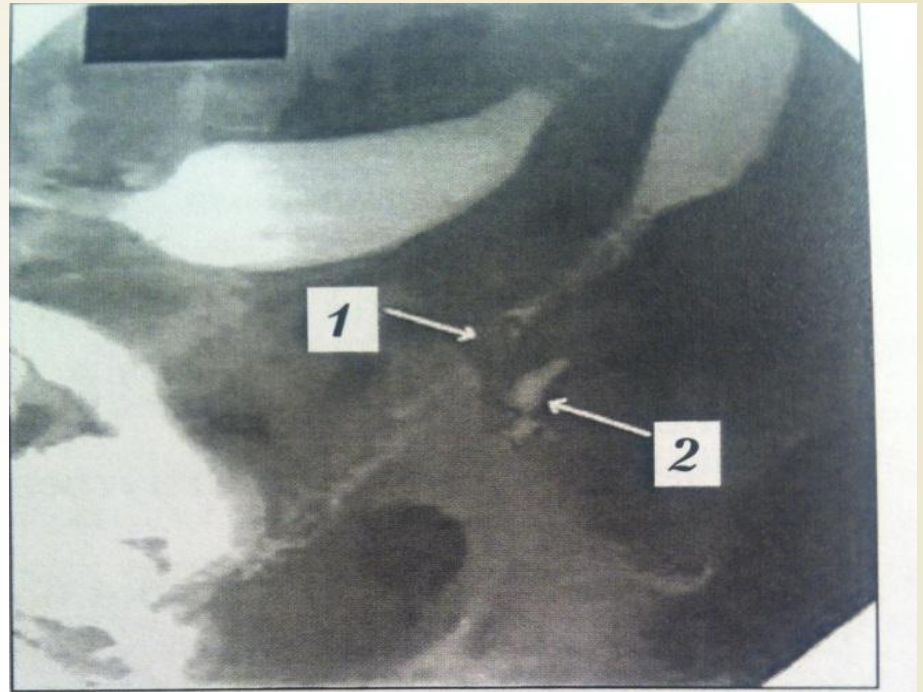
Б. Схема кишечных осложнений БК.



Рентгенологические проявления Болезни Крона:

- 1) Регионарное, прерывистое поражение
- 2) Стриктуры.
- 3) «Булыжная мостовая» - мозаичная картина с мелкими дефектами наполнения за счет отека и линейных язв.
- 4) Свищи.
- 5) Межкишечные абсцессы.
- 6) Ригидность пораженных петель кишечника.
- 7) «Симптом струны» (резкое сужение просвета конечного отдела подвздошной кишки).





БОЛЕЗНЬ
КРОНА

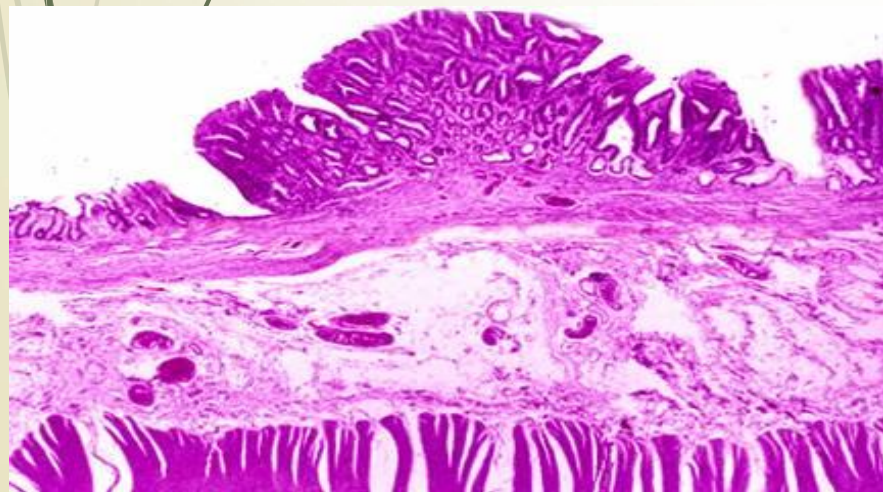
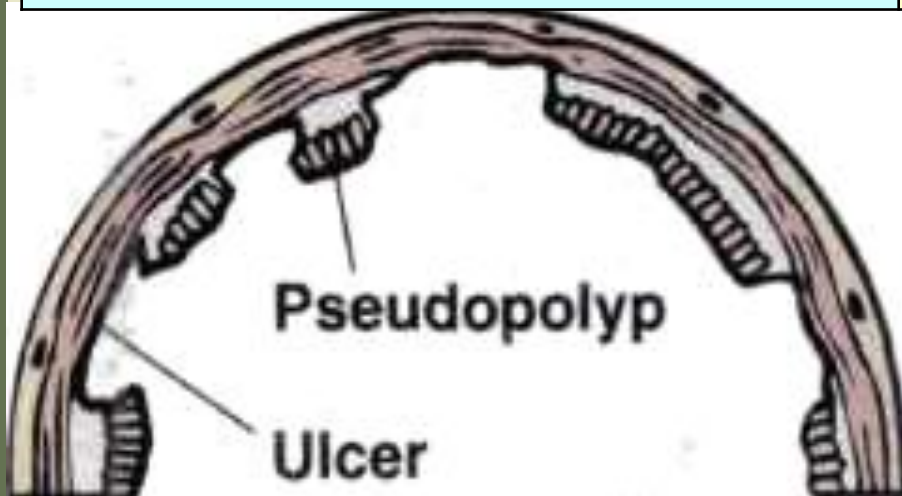


ЯЗВЕННЫЙ
КОЛИТ



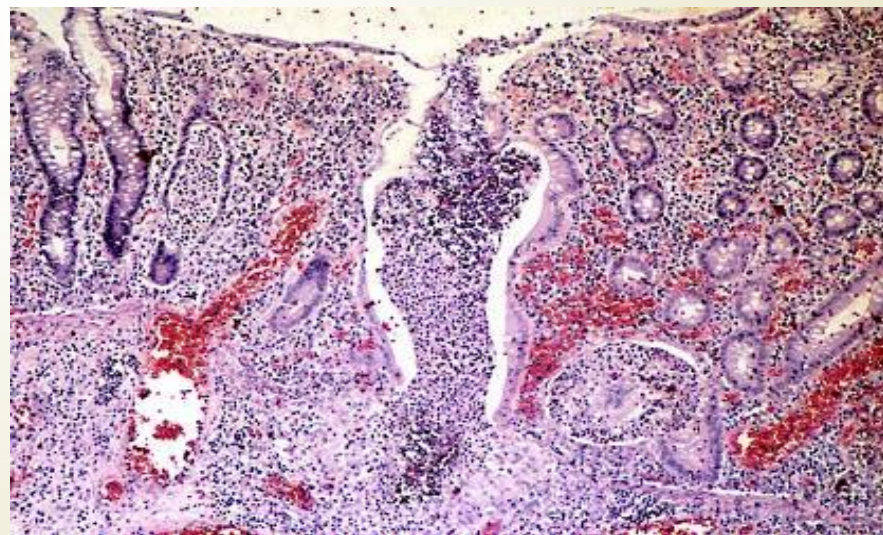
НЯК

Обширные, плоские язвы,
разделенные псевдополипами



Болезнь Крона

Щелевидные, продольные и
поперечные, слизистая в виде
"булыжной мостовой"



НЯК

Воспалительные полипы часто



Болезнь Крона

Воспалительные полипы редко



Сероза не изменена

Анальные изменения редко, в основном острые фиссуры.

Локальный перитонит, спайки

Множественные изъязвления, анальной зоны, часто хронические фиссуры (75%)

АФТЫ

СКЛЕРОЗИРУЮЩИЙ ХОЛАНГИТ

АНЕМИЯ, УВЕИТ, ЛИХОРАДКА, ПОТЛИВОСТЬ, ЖЕЛТУХА

БОЛЬ В ПРАВОЙ ПОДВЗДОШНОЙ ОБЛАСТИ

БОЛЬ В ЖИВОТЕ

АРТРАЛГИИ

ПОТЕРЯ ВЕСА

УЗЛОВАЯ ЭРИТЕМА

ДИАРЕЯ, С ПРИМЕСЬЮ КРОВИ, СЛИЗИ

ВИД БОЛЬНОГО

Ulcerative colitis and Crohn's disease

РОТОВАЯ ПОЛОСТЬ:
СТОМАТИТЫ, АФТОЗНЫЕ ЯЗВЫ

ГЛАЗА:
ЭПИСКЛЕРОЗ, УВЕИТ

СТРЕАТОЗ ПЕЧЕНИ

ПОЧКИ:
КАМНИ
НЕФРОЛИТИАЗ
ГИДРОНЕФРОЗ
ФИСТУЛЫ
ИНФЕКЦИИ
МОЧЕВЫВОДЯЩИХ ПУТЕЙ

ЖКБ, СКЛЕРОЗИРУЮЩИЙ ХОЛАНГИТ

СУСТАВЫ:
СПОНДИЛИТЫ
САКРОИЛЕИТЫ, АРТРИТЫ

КОЖА:
УЗЛОВАЯ ЭРИТЕМА
ГАНГРЕНОЗНАЯ ПИОДЕРМИЯ

ФЛЕБИТЫ