

MULTIMORBID PATIENT WITH CROHN'S DISEASE: CLINICAL CASE

Student of 3rd course (General medicine): **Abughali Mohammed**

Student of 3rd course (General medicine): **Elghazaily Abubaker**

Zhuravleva M.S., associate professor, PhD,

Vorobyov S.L., director of the National Center for Clinical Morphological Diagnosis, PhD

Belyakov I.A., Head of the Pathology Department, National Center for Clinical Morphological Diagnosis, PhD

Adamova Y.V., nephrologist, Peter the Great Clinic



FEMALE PATIENT V., 78-YEAR-OLD (1946 Y.B.)

Complaints during admission to the Endocrinology department on 25.07.2024:

everyday abdominal pain in hypogastrium (4 scores VAS), discomfort in the suprapubic region, frequent urination, sweating.

Anamnesis Morbi:

- ➔ Since **2015 (at 69 years)**, the patient has noted periodic mushy stool up to 5 times for 24 hours at night and day time, with an admixture of mucus, abdominal pain, chills, progressive decrease in body weight for more than 12 kg. Symptomatic treatment was used with slight positive effect.
- ➔ In **2019**, she was examined for the first time at the department of gastroenterology. Colonoscopy and histology revealed signs of Crohn's disease, the condition was regarded as Crohn's disease, colonic (L2) stricturing (B2) type with a perianal disease.
- ➔ In **April 2024**, due severe, steroid-dependent course, and AZA non-efficacy biological therapy was started: ustekinumab, with clinical improvement.
In parallel, high level of blood creatinine up to 2220 $\mu\text{mol/l}$ was detected.



Previous therapy during **the last 3 years**:
Prednisolone (5-20 mg per day according to her well-being) +
Azathioprine (AZA).

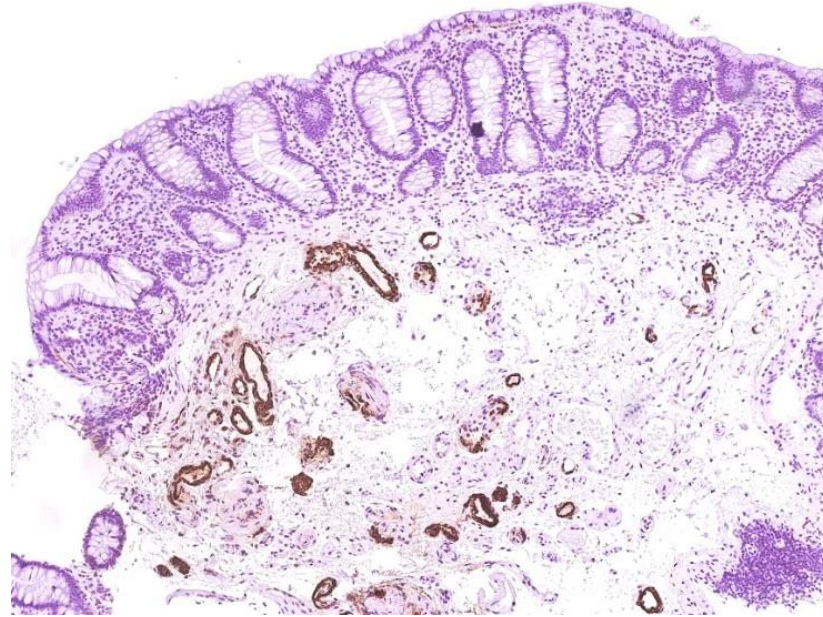
↓
Steroid-dependent course,
AZA non-efficacy

HISTOLOGICAL PICTURES OF COLONIC BIOPSIES

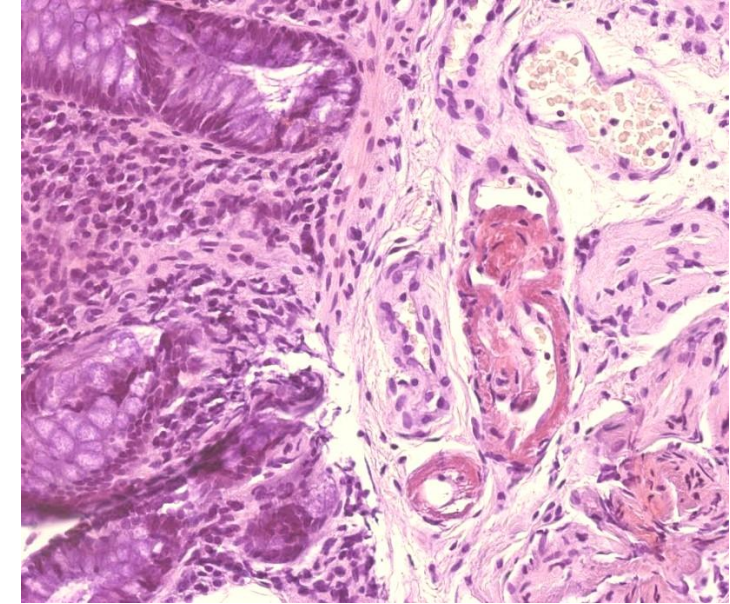
(**COLONOSCOPY 28.02.2024:** FROM ANAL CANAL UP TO LOWER 1/3 OF SIGMOID MUCOUS MEMBRANE IS HYPEREMIC, EDEMATOUS, WITH MULTIPLE LINEAR AND POLYGONAL ULCERS, UP TO 15 MM IN DIAMETER, WITH FIBRIN, MULTIPLY EROSIONS, WITHOUT VASCULAR PATTERN. **CONCLUSION:** CROHN'S DISEASE, COLITIS, MODERATE ENDOSCOPIC ACTIVITY).



Histological picture of colonic biopsies with **normal histological structure**, HE, x40



Immunohistochemistry of the same samples: positive A-amyloid reaction in small arteries wall, x100.



Small arteries of submucous layer with **signs of amyloid deposition**, Congo red, x200.

Conclusion: Crohn's disease signs.

AA amyloidosis with diffuse colonic and iliac vessels of the submucosal layer involvement.

ANAMNESIS VITAE

Past disease:

→ Bronchoectatic disease from childhood

Resection of left lung lower lobe at 17 years old

→ COVID-19

→ Diabetes mellitus due to intake of steroids

→ CKD 4th stage (GFR - 27 ml/min, 24-hour proteinuria 6 g)

→ Past surgeries:

→ Appendectomy

Family History:

→ Mother was suffering from leukemia

- ❖ **AA amyloidosis** is acquired form of amyloidosis, with variable age distribution with chronic infection (like bronchoectatic disease) or autoimmune conditions (like IBD) as underlying course.
- ❖ Renal amyloidosis is the leading involved organ, presenting with renal failure and/or proteinuria.
- ❖ Deposition is typically systemic.*

Female Patient V., 78-year-old (1946 y.b.)

Diagnosis: Crohn's disease, colonic (L2) stricturing (B2) type, severe course with a perianal disease (in anamnesis), mild clinical activity (CDAI 180 scores), moderate endoscopic activity (28.02.2024). Steroid-dependency. AZA non-efficacy. Biological therapy (ustekinumab from April 2024).

Extraintestinal manifestations: Anemia of multi-origin, mild grade. Malnutrition.

Concurrent disease: Chronic kidney disease, 4th stage (GFR 27 ml/min). Nephrotic syndrome. Renal amyloidosis ?

Concomitant diseases: Bronchoectatic disease. Resection of left lung lower lobe (1963). Steroid-induced diabetes mellitus.

THANK YOU!

According to scientific data, the prevalence of amyloidosis among IBD patients is 0.53% (95% confidence interval [CI]: 0.32-0.75), although epidemiological data suggest that it may be under-diagnosed.

Identifying risk factors of amyloidosis in IBD patients and screening for proteinuric renal dysfunction are useful to improve diagnostic accuracy.

Referral of biopsies to a tertiary centre should also be considered, to improve diagnostic accuracy.*

* J.T. Cuquerella et al. Amyloidosis in Inflammatory Bowel Disease: A Systematic Review of Epidemiology, Clinical Features, and Treatment // J Crohns colitis. - 2016. - 10(10). - P. 1245-1253.

