

normochromic anemia appeared after taking PASK in combination with other anti-tuberculosis drugs, which were prescribed in accordance with Federal clinical guidelines (2014) for the diagnosis and treatment of tuberculosis in children and adolescents. The changes are probably associated with inhibition of bone marrow hematopoiesis while taking the PASK drug.

2. According to the order of the Ministry of Health of the Russian Federation of 26.08.2010 No. 757n "On approval of the procedure for monitoring the safety of drugs for medical use, registration of side effects, serious adverse reactions when using drugs for medical use" after excluding other factors, a probable degree of reliability of causation was identified an adverse effect of adverse reactions to PASC.

#### References

1. Aksenova V.A. Apt A.S. Barinov V.S. Nacional'noe rukovodstvo po ftiziatrii [National guide to phthisiology]. Moscow: Geotar Media, 2010, p. 512.
2. Ivanova D.A. Gematologicheskie oslozhneniya protivotuberkuleznoj

himioterapii. [Hematologic complications of tuberculosis chemotherapy]. Tuberkulez i social'no znachimye abolevaniya [Tuberculosis and socially significant diseases]. Moscow, Medicine, 2014. № 4, p. 65.

3. Ivanova D.A., Borisov S.E., Ryzhov A.M., Ivanushkina T.N. Chastota i risk razvitiya tyazhelyh nezhelatel'nyh reakcij pri lechenii vyavlenykh bol'nyh tuberkulezom [Frequency and risk of severe adverse reactions in the treatment of newly diagnosed tuberculosis patients] Tuberkulez i bolezni legkih [Tuberculosis and lung diseases]. Moscow, 2012, decision №12, p. 15-22.

4. Mishin V.Yu. Medikamentoznye oslozhneniya kombinirovannoj himioterapii tuberkuleza legkih. [Drug complications of combined chemotherapy of pulmonary tuberculosis]. Moscow: OOO «Medicinskoe informacionnoe agentstvo», 2007, p. 248.

#### The authors:

Gulyaeva Nadezhda Andreevna, associate Professor of infectious diseases, Phthisiology and Dermatovenerology Department, MI NEFU, nagulyaeva@

yandex.ru;

Ivanova Olga Nikolaevna - Professor, Department of Pediatrics and pediatric surgery, MI NEFU, olgadoctor@list.ru;

Argunova Elena Filippovna - associate Professor of Pediatrics and pediatric surgery MI NEFU, eargunova@mail.ru;

Dmitrieva Tatiana Genadiyevna - Professor of Pediatrics and pediatric surgery, MI NEFU, dtg63@mail.ru;

Loginova Evdokiya Feodorovna - Deputy Head physician on the childhood GBU NPTS "Phthisiology", nagulyaeva@yandex.ru;

Guryeva Olga Ivanovna - head of the Department for children, tuberculosis patients GBU NPTS "Phthisiology", nagulyaeva@yandex.ru;

Zolotareva Nina Alekseevna - the doctor-the phthisiatrician office for children with tuberculosis GBU NPTS "Phthisiology", nagulyaeva@yandex.ru;

Andreeva Sardana Konstantinovna-phthisiologist of the Department for children with tuberculosis of GBU NPC "Phthisiology" nagulyaeva@yandex.ru;

Adamova Valentina Dmitriyevna - the student of 1 course of MPD, MI NEFU, kirmmr@mail.ru.

V.G. Ignatiev, I.A. Holtosunov, L.A. Krivoshapkina, T.S. Dyagileva, N.A. Gulyaeva, V.M. Mikhailova, O.A. Luginova, A.A. Solovov, N.A. Sidorov, O.V. Ivanova

## A CASE OF RARE LOCALIZATION OF EXTRAPULMONARY TUBERCULOSIS AND SCREENING WITH CROHN'S DISEASE

DOI 10.25789/YMJ.2019.65.32

#### ABSTRACT

The article speaks about the clinical case of rare localization of extrapulmonary tuberculosis, abdominal tuberculosis in incurable stage. **Introduction.** Abdominal tuberculosis is characterized by polymorphism of clinical presentation, and sometimes proceeds only with a fever without any symptoms, characteristic for diseases of gastrointestinal tract. Intestinal process localization can arise at any stage of primary and secondary tuberculosis development. Sometimes it develops as a separate disease in the form of the circumscribed lesion of ileocecal or other part of the intestine. [1]. Diagnostics of extrapulmonary tuberculosis localizations is difficult, this disease tends to proceed hidden, behind a mask of other pathological processes [2,3,4]. Unfortunately, there are no many researches on extrapulmonary forms of tuberculosis that cause late detection, more frequent at incurable stage [4]. **Research objective:** Description of a clinical case of rare localization of tuberculosis and differential diagnostics with Crohn's disease. **Materials and research methods:** we present some data of clinical supervision of the patient with abdominal tuberculosis: infiltration-ulcer tuberculosis of intestine with involvement of iliac and colon (MTB (+), analysis PCR-RV). Tubercular mesadenitis. Extensive miliary dissemination of serous membranes of abdomen, focal generalization in the liver, spleen, in the upper lobe of the right lung (AFB (2 +), luminescent method. Complications of the basic disease: Punching of tubercular ulcers of iliac, cecum and sigmoid guts. Diffused purulent - stool peritonitis. **Results and discussion:** Patient A. was admitted to «Republic Hospital №2—Emergency Center» in February 19, 2018, at 12.13 p.m. Diagnosis on admission: Crohn's disease with a lesion of cecum, ascending colon, active stage. Severe degree. Peritonitis. After preoperative preparation the patient was operated according to the emergency indications. Operation course. Date 19.02.2018. Time: the beginning - 14.55, the end - 16.40. Operation: Subtotal colectomy. Remote macromedication: large gut with 40 cm of iliac. Postoperative diagnosis: Crohn's disease with a lesion of large and small intestines. Active stage, severe degree. Perforation of ileac and cecum. Cecum necrosis. Large intestine phlegmon. Diffuse purulent - fecal peritonitis. A terminal stage. 19.02.2018 at 20.00. Cardiac arrest happened on the background of the intensive therapy AP 0/0, heart rate 0. Resuscitation actions without effect were within 30 min. Biological death was verified at 20:30. **Postmortem diagnosis.** Basic: Crohn's disease with a lesion of small and large intestines. Active stage, severe degree. Perforation of iliac and cecum. Cecum necrosis. Large intestine phlegmon. Diffuse purulent-stool peritonitis. A terminal stage. Complications of the basic diagnosis: Perforation of iliac and cecum. Cecum necrosis. Large intestine phlegmon. Diffuse purulent-stool peritonitis. A terminal stage. Cachexia. A syndrome of disseminated intravascular coagu-

lation. Acute multisystemic failure. Sepsis. Septic shock. **Conclusion:** Thus, this case report notifies general practitioners of various localization of tuberculosis. Examination of patients with abdominal tuberculosis demands, first of all, correct interpretation of anamnestic, clinical, laboratory, radiological data and results of special methods of research. A combination of this data is absolutely accessible to any general practitioners where patients are admitted for the first time, it is sufficient for primary selection and further patient's examination to confirm tubercular etiology of disease.

**Keywords:** intestine tuberculosis, purulent fecal peritonitis, terminal stage, Crohn's disease.

**Introduction.** Abdominal tuberculosis is characterized by polymorphism of clinical presentation, and sometimes proceeds only with a fever without any symptoms, characteristic for diseases of gastrointestinal tract. The digestive tract is involved in pathological process at any lesion localization. Specific changes seldom confine only intestine, lymph nodes or peritoneum. As a rule, these anatomically connected formations are involved in process almost simultaneously. However lesion symptoms of one organ quite often prevail in the clinical presentation that allows evolving disease in a separate clinical entity. Intestinal process localization can arise at any stage of primary and secondary tuberculosis development. Sometimes it develops as a separate disease in the form of the circumscribed lesion of ileocecal or other part of the intestine [1]. Despite positive tendencies in epidemic tuberculosis situation as a whole, dynamics of extrapulmonary tuberculosis (EPTB) is unstable [3, 5]. Diagnostics of extrapulmonary tuberculosis localizations is difficult, this disease tends to proceed hidden, behind a mask of other pathological processes [2, 3, 4]. Unfortunately, there are no many researches on extrapulmonary forms of tuberculosis that cause late detection, more frequent at incurable stage [4].

**Research objective:** Description of a clinical case of rare localization of tuberculosis and differential diagnostics with Crohn's disease.

**Materials and research methods:** we present some data of clinical supervision of the patient with abdominal tuberculosis: infiltration-ulcer tuberculosis of intestine with involvement of iliac and colon (MTB (+), analysis PCR-RV). Tubercular mesadenitis. Extensive miliary dissemination of serous membranes of abdomen, focal generalization in the liver, spleen, in the upper lobe of the right lung (AFB (2 +), luminescent method. Complications of the basic disease: Punching of tubercular ulcers of iliac, cecum and sigmoid guts. Diffused purulent - stool peritonitis.

**Results and discussion:** Patient A., female, was admitted to «Republic Hospital №2–Emergency Center» in February 19, 2018, at 12.13 p.m., transferred from gastroenterological department of «Yakutsk municipal clinical Hospital» (YMCH) to coloproctological department (CD) with the diagnosis: Crohn's disease with a lesion of cecum, ascending colon, stricturing course,

severe case.

Diagnosis on admission: Crohn's disease with a lesion of cecum, ascending colon, active stage. Severe degree. Peritonitis.

Clinical diagnosis: Crohn's disease with a lesion of cecum, small and large intestines. Active stage, severe degree. Perforation of iliac and cecum. Cecum necrosis. Large intestine phlegmon. Diffused purulent-stool peritonitis. A terminal stage. Cachexia. A syndrome of disseminated intravascular coagulation. Acute multisystemic failure. Sepsis. Date of determined clinical diagnosis is February 19, 2018.

Patient's condition at admission: critical: t - 36.6 C, arterial blood pressure 60/40.

Complaints: stomach ache, general fatigue.

**Anamnesis:** stomach ache of spastic character started in April 2017, after hirudotherapy course on sterility (transvaginal). In August 2017 the patient was examined in Republic Hospital №1, surgical department. By results of colonoscopy with biopsy, EGD, the diagnosis was: Crohn's disease was confirmed in Moscow, information about the Hospital wasn't known, according to patient's words. She was discharged from National centre of Medicine in November 3, 2017 with recommendations: sulfasan 2 tablets 3 times a day, bifidumbacterin 5 doses 3 times a day during 1 month, nopolpa 40 mg, iron drugs, angiovit 1 tablet 1 time a day. After the discharge, patient was treated by the therapist. Analyses showed increase of anaemia, fatigue, periodical pains of spastic character. The patient was hospitalized in central district Hospital in December 11, 2017. Conservative, replaceable haemostatic therapy was made. Anaemia was conserved, occult blood feces analysis +. The consilium with participation of deputy of head physician, deputy of therapeutical department, gynecologist, surgeon-oncologist was in December 18, 2017. The consultation of coloproctologist, colonoscopy was recommended. The patient was hospitalized in coloproctological department from 20.12.17 till 29.12.17. The patient was discharged with amelioration and further treatment at gastroenterologist, surgeon. According to sister's information, exacerbation started in January 2018, liquid stool 5-6 times, bloating, fatigue, no ability to walk. Patient's mother and sister cared for the patient.

The patient was admitted to therapeutic department of central district Hospital and transferred to Yakutsk municipal clinical Hospital for treatment correction. In February 09, 2018 she was Hospitalised in Yakutsk municipal clinical Hospital. Deterioration of health condition began since 16.02.18 with vomiting, bloating, stomach pain in all departments. Abdominal CT was made in February 19, 2018: free air in abdomen. The diagnosis: Crohn's disease with a lesion of cecum and ascending colon, stricturing degree, perforation of a hollow organ. Peritonitis. Cachexia. Anaemia of heavy severity level. The patient was admitted to Republic Hospital №2. After preoperative preparation the patient was operated according to the emergency indications.

Operation course. Date 19.02.2018. Time: the beginning – 14.55, the end - 16.40.

Operation: Subtotal colectomy.

Anaesthetic method: endotracheal anesthesia

**Operation course:** Median laparotomy under endotracheal anesthesia after processing of operational field by chlorhexidine spirituous solution was done three times. The purulent-fecal exudation with a stinking odour to 2,5 litres, taken to inoculation, was evacuated from abdominal cavity by evacuator. At revision loops of small intestine were bloated with crimson colour in the upper departments, peristalsis was. There was iliac necrosis on a field of 20 cm from iliac-cecal angle and cecum, there were punched forams in several places on these intestines. A peritoneum in the inferior part was black colour, a big epiploon was necrotized through all its length, rash of whitish, brown, yellow colour from 1 mm to 6 mm on all small and large intestines. Places of necrosis from a serous cover in the dimensions to 5-6 cm in diameter were in large intestine, no peristalsis, large intestine was recognised nonviable from cecum to sigmoid. Mobilisation of mesentery was in 40 cm from iliac-cecal angle to sigmoid gut. Proximal stump (ileac gut) was made. Abdomen was washed by 8 litres of antiseptic solutions. Diffusive bleeding was marked from small pelvis peritoneum. Attempt of hemostasis by electrocoagulation was unsuccessful, imposed by haemostatic sponges, tamponed by 3 napkins, lateral canals, small pelvis was also tightly tamponed by a diaper. Hemostasis. Small pelvis drainage and left lateral canal with

silicone tubes. Nasalintestinal intubation. Sutures were through all layers.

Remote macromedication: large gut with 40 cm of iliac.

Postoperative diagnosis: Crohn's disease with a lesion of large and small intestines. Active stage, severe degree. Perforation of ileac and cecum. Cecum necrosis. Large intestine phlegmon. Diffuse purulent - fecal peritonitis. A terminal stage.

The recommendation of the doctor about further tactics of treatment: sanation relaparotomy at stabilization of patient's condition. The early postoperative period was proceeded extremely hard, severe condition of the patient's state was caused by a syndrome of polyorgan insufficiency, DIC syndrome.

19.02.2018 at 20.00. Cardiac arrest happened on the background of the intensive therapy AP 0/0, heart rate 0. Resuscitation actions without effect were within 30 min. Biological death was verified at 20:30.

#### Postmortem diagnosis.

Basic: Crohn's disease with a lesion of small and large intestines. Active stage, severe degree. Perforation of iliac and cecum. Cecum necrosis. Large intestine phlegmon. Diffuse purulent-stool peritonitis. A terminal stage.

Complications of the basic diagnosis: Perforation of iliac and cecum. Cecum necrosis. Large intestine phlegmon. Diffuse purulent-stool peritonitis. A terminal stage. Cachexia. A syndrome of disseminated intravascular coagulation. Acute multisystemic failure. Sepsis. Septic shock.

From the report of pathoanatomical dissecting №118/B from 2/20/2018. (Picture 3, picture 2)

Basic disease: A18.3 infiltration-ulcer tuberculosis of intestine with involvement of iliac and colon (MTB (+), analysis PCR-RV). Tubercular mesadenitis. Extensive miliary dissemination of serous membranes of abdomen, focal generalization in the liver, spleen, in the upper lobe of the right lung (AFB (2 +), luminescent method).

Complications of the basic disease: Punching of tubercular ulcers of iliac, cecum and sigmoid guts. K 67.3 Diffused purulent - stool peritonitis. Operation: Laparotomy, subtotal colectomy, ileum resection in 19.02.2018. D 65 Syndrome of disseminated intravascular coagulation: operational wound bleeding, hemoperitoneum (600 ml of blood and 140 g of red clots). Cachexia (BMI = 12,7 kg/m). Renal - hepatic insufficiency. The general venous anaemia and dystrophic



толстый кишечник 019658 - 2018

**Fig. 1.** Large intestine preparation patient A changes of parenchymatous organs. Edema of lungs and brain. A bilateral hydrothorax (left 300 ml, right 600 ml).

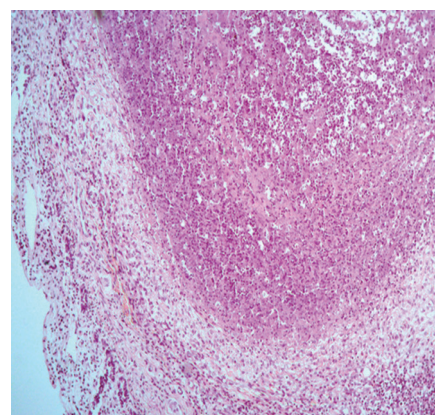
Cause of death: K 67.3 Diffuse purulent - fecal peritonitis. D 65 Syndrome of disseminated intravascular coagulation.

The death of the patient was inevitable due to serious diagnosis and extremely critical condition on admission in February 19, 2018.

**Conclusion:** this case report notifies general practitioners of various localization of tuberculosis. Examination of patients with abdominal tuberculosis demands, first of all, correct interpretation of anamnestic, clinical, laboratory, radiological data and results of special methods of research. A combination of this data is absolutely accessible to any general practitioners where patients are admitted for the first time, it is sufficient for primary selection and further patient's examination to confirm tubercular etiology of disease.

#### References

1. Vnelegochny'j tuberkulez: rukovodstvo dlya vrachej [Extrapulmonary tuberculosis: a guide for doctors] Pod. red. Brazhenko N.A. [edited by N.A. Brazhenko]. St.Peterburg: SpeczLit, 2013, p. 170-183 p.
2. Zhukova I. I. Kul'chavenya E. V. Xoltobin D. P. Brigatyk E.V., et al. Tuberkulez mocheopolovoj sistemy segodnya [Urogenital tuberculosis today]. Urologiya, 2013, № 1, p 13-16.
3. Kul'chavenya E. V. Krasnov V.A. Skorniyakov S.N., et al. Sovremennyye tendencii e'pidemicheskoy situacii po vnetorakal'nomu tuberkulezu [Current trends in the epidemiological situation of extrapulmonary tuberculosis]. Tuberkulez i bolezni legkix [Tuberculosis and lung diseases]. Moscow: New Terra, 2013, № 12, p. 34-38.
4. Petrenko V. I. Todoriko L.D. Boyko



**Fig. 2.** Colon microscopy patient A

A.V. Aktual'ny'e voprosy' diagnostiki i lecheniya vnelegochnogo tuberkuleza [Topical issues of diagnosis and treatment outside extrapulmonary tuberculosis]. Tuberkulez, legochny'e bolezni, VICH-infekciya [Tuberculosis, lung disease, HIV infection]. Kiev, 2013, № 3 (14), p. 86-89.

#### The authors:

Yakutsk, Sakha Republic (Yakutia), Russian Federation:

Ignatiev Victor Georgievitch – Doctor of Medicine, professor, head of department Medical institute NEFU, [ignat\\_prof@mail.ru](mailto:ignat_prof@mail.ru)

Holtosunov I.A. - coloproctologist, post-graduate student of Medical institute NEFU, [holtocunov.ivan@mail.ru](mailto:holtocunov.ivan@mail.ru)

Krivoshapkina Lena Aleksandrovna - coloproctologist, post-graduate student of Medical institute NEFU, [lena.krivosha-pkina@mail.ru](mailto:lena.krivosha-pkina@mail.ru)

Dyagileva Tatyana Semenovna –candidate of medical sciences, senior lecturer of Medical institute NEFU, [dte\\_mi@mail.ru](mailto:dte_mi@mail.ru)

Gulyaeva Nadezhda Andreevna – candidate of medical sciences, senior lecturer, [nagulyaeva15@yandex.ru](mailto:nagulyaeva15@yandex.ru)

Mikhaylova Valentina Mikhailovna – candidate of medical sciences, head of coloproctological department Republic Hospital №2, [valentina\\_mihail@mail.ru](mailto:valentina_mihail@mail.ru)

Luginova Olesya Afanasievna - coloproctologist of Republic Hospital №2, [luginova.oa@yandex.ru](mailto:luginova.oa@yandex.ru)

Soloviev Alexey Alekseyevich - coloproctologist of Republic Hospital №2, [holtocunov.ivan@mail.ru](mailto:holtocunov.ivan@mail.ru)

Sidorov Nikolay Anatolyevich - coloproctologist of Republic Hospital №2, [doctorsidon3@yandex.ru](mailto:doctorsidon3@yandex.ru)

Ivanova Oksana Valentinovna - pathoanatomist of Republic Hospital №1, [hrknk.990@gmail.com](mailto:hrknk.990@gmail.com).