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HIV-associated B-cell lymphoma of a patient with multiresistant tuberculosis (clinical case)

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Key words: HIV, lymphoma, tuberculosis multi-drug resistant.

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In the modern context, there is an increase in the detection of HIV/tuberculosis co-infection, which makes it difficult to timely diagnose and treat complications of HIV infection and, as a result, it is the cause of death. Today, it has been found that a high incidence of oncological diseases is a feature of HIV infection, and HIV infection is a risk factor for B-cell lymphoma development.

The purpose of the work is to introduce the practitioners to the features of manifestation, diagnosis and course of HIV-associated B-cell lymphoma in a patient with multiresistant tuberculosis.

Materials and methods. The article deals with a clinical case of our own observations of the multiresistant pulmonary tuberculosis (MRTB) progression in a patient with HIV-associated B-cell lymphoma. The patient underwent inpatient treatment in the Department of Pulmonary Tuberculosis No. 3 of the clinical base of the Phthisiology and Pulmonology Department of ZSMU (Zaporizhzhia State Medical University) in the Municipal Institution "Zaporizhzhia Regional TB Clinical Dispensary" (ZRTBCD), inpatient treatment in the Sophia Specialized Tuberculosis Hospital (SSTBH) № 55, branch of the "Health Center of Ukraine" in the Zaporizhzhia region.

The results of our own observations. The patient was in a dispensary for HIV infection, chronic viral hepatitis B and C at an infectious disease specialist for 13 years. For all that, ART was not prescribed, since the patient refused it. Against the background of HIV infection, the patient developed retroperitoneal B-cell lymphoma, which was initially interpreted as tuberculosis of the retroperitoneal lymph nodes and was diagnosed only at autopsy. Additionally, pulmonary MRTB, chronic viral hepatitis B and C were occurred. Despite the effective antimycobacterial therapy for pulmonary MRTB, metastatic lesions of the lungs, liver, parietal and visceral pleura, abdominal lymph nodes, development of bilateral exudative pleurisy with a hemorrhagic component complicated the progressive course of oncologic disease. Given the situation, multiple organ failure developed and progressively increased with severe endogenous intoxication, which caused the death, due to the progressive course of cancer against the background of HIV infection with an extremely low number of CD4 lymphocytes (<100 cells/μl), as well as pulmonary MRTB.

Conclusions. The lack of timely treatment of HIV infection (antiretroviral therapy) is associated with opportunistic diseases, severe complications development that occur in the guise of any other pathology, and consequently are extremely difficult to diagnose. The untimely lifetime diagnosis of retroperitoneal B-cell lymphoma in the described case resulted in a lack of chemotherapy, which caused the metastatic process development and death of the patient. Therefore, practitioners should always be aware of oncology, and be more vigilant with HIV-infected patients whose CD4 count of less than 100 cells/μl.

Ключові слова: ВІЛ-інфекція, В-клітинна лімфома, мультирезистентний туберкульоз.

Запорізький медичний журнал. – 2019. – Т. 21, № 1(112). – С. 150–156

ВІЛ-асоційована В-клітинна лімфома у хворого на мультирезистентний туберкульоз (клінічний випадок)

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Визначають збільшення частоти виявлення ко-інфекції ВІЛ/туберкульоз, що створює труднощі своєчасної діагностики та лікування ускладнень ВІЛ-інфекції та, як наслідок, є причиною летального результату. Встановили, що особливість ВІЛ-інфекції – висока частота розвитку онкологічних захворювань, і ВІЛ-інфекція є фактором ризику розвитку В-клітинної лімфоми.

Мета роботи – ознайомлення фахівців-практиків з особливостями проявів, діагностики та перебігу ВІЛ-асоційованої В-клітинної лімфоми у хворого на мультирезистений туберкульоз.

Матеріали та методи. Описано клінічний випадок власних спостережень розвитку мультирезистентного туберкульозу (МРТБ) легень у пацієнта з ВІЛ-асоційованою В-клітинною лімфомою. Хворий перебував на стаціонарному лікуванні у відділенні легеневого туберкульозу № 3 клінічної бази кафедри фтизіатрії і пульмонології ЗДМУ в КЗ «Запорізький обласний протитуберкульозний клінічний диспансер», стаціонарному лікуванні в Софіївській спеціалізованій туберкульозній лікарні № 55 філії «Центру охорони здоров'я України» в Запорізькій області.

Результати. Протягом 13 років пацієнт перебував на диспансерному обліку в інфекціоніста з клінічним діагнозом: ВІЛ-інфекція, хронічний вірусний гепатит В+С. При цьому АРТ не призначали, оскільки пацієнт від неї відмовлявся. На тлі ВІЛ-інфекції в пацієнта розвинулася В-клітинна лімфома позаочеревинної порожнини, що спочатку була розцінена як туберкульоз позаочеревинних лімфовузлів і диференційована тільки посмертно. Крім того, були наявні МРТБ легень, хронічний вірусний гепатит В+С. Незважаючи на ефективну антимікобактеріальну терапію МРТБ легень, прогресивний перебіг онкологічного процесу ускладнився метастатичними ураженнями легень, печінки, листків парієтальної та вісцеральної плеври, лімфатичних вузлів черевної порожнини, розвитком двостороннього ексудативного плевриту з геморагічним компонентом. В умовах, що склалися, внаслідок прогресивного перебігу онкологічного захворювання на тлі ВІЛ-інфекції з украй низькою кількістю CD4-лімфоцитів (<100 клітин/мкл), а також МРТБ легень, розвинулася та прогресивно наростала поліорганна недостатність внаслідок вираженої ендогенної інтоксикації, що стало безпосередньою причиною смерті.

Висновки. Відсутність своєчасного лікування ВІЛ-інфекції (антиретровірусної терапії) призводить до приєднання опортуністичних захворювань, розвитку важких ускладнень, що мають перебіг під маскою іншої патології, внаслідок чого надзвичайно складні для діагностики. Несвоєчасна прижиттєва діагностика В-клітинної лімфоми позаочеревинної порожнини в пацієнта в описаному випадку спричинила відсутність хіміотерапії, що і стало причиною розвитку метастатичного процесу та летального результату. Тому лікарям-практикам необхідно пам'ятати про онконастороженість і бути вкрай пильними з пацієнтами з ВІЛ-інфекцією та кількістю CD4-лімфоцитів менше ніж 100 клітин/мкл.

ВИЧ-ассоциированная В-клеточная лимфома у больного мультирезистентным туберкулезом (клинический случай)

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Ключевые слова: ВИЧ-инфекция, В-клеточная лимфома, мультирезистентный туберкулез.

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Отмечено повышение частоты обнаружения ко-инфекции ВИЧ/туберкулез, что создает трудности своевременной диагностики и лечения осложнений ВИЧ-инфекции и, как следствие, является причиной летального исхода. Установлено, что особенность ВИЧ-инфекции – высокая частота развития онкологических заболеваний, и ВИЧ-инфекция является фактором риска развития В-клеточной лимфомы.

Цель работы – ознакомление практикующих специалистов с особенностями проявлений, диагностики и течения ВИЧ-ассоциированной В-клеточной лимфомы у больного мультирезистеным туберкулезом.

Материалы и методы. Описан клинический случай собственных наблюдений развития мультирезистентного туберкулеза (МРТБ) легких у пациента с ВИЧ-ассоциированной В-клеточной лимфомой. Больной находился на стационарном лечении в отделении легочного туберкулеза № 3 клинической базы кафедры фтизиатрии и пульмонологии ЗГМУ в КУ «Запорожский областной противотуберкулезный клинический диспансер», стационарном лечении в Софиевской специализированной туберкулезной больнице № 55 филиала «Центра охраны здоровья Украины» в Запорожской области.

Результаты. На протяжении 13 лет пациент находился на диспансерном учете у инфекциониста с клиническим диагнозом: ВИЧ-инфекция, хронический вирусный гепатит В+С. При этом АРТ не назначали, поскольку пациент от нее отказывался. На фоне ВИЧ-инфекции у пациента развилась В-клеточная лимфома забрюшинного пространства, которая была изначально расценена как туберкулез забрюшинных лимфоузлов и дифференцирована только посмертно. Кроме того, имели место МРТБ легких, хронический вирусный гепатит В+С. Несмотря на эффективную антимикобактериальную терапию МРТБ легких, прогрессивное течение онкологического процесса осложнилось метастатическим поражением легких, печени, листков париетальной и висцеральной плевры, лимфатических узлов брюшной полости, развитием двухстороннего экссудативного плеврита с геморрагическим компонентом. В сложившихся условиях, вследствие прогрессивного течения онкологического заболевания на фоне ВИЧ-инфекции с крайне низким количеством CD4-лимфоцитов (<100 клеток/мкл), а также МРТБ легких, развилась и прогрессивно нарастала полиорганная недостаточность вследствие выраженной эндогенной интоксикации, что стало непосредственной причиной смерти.

Выводы. Отсутствие своевременного лечения ВИЧ-инфекции (антиретровирусной терапии) приводит к присоединению оппортунистических заболеваний, развитию тяжелых осложнений, которые протекают под маской другой патологии, вследствие чего чрезвычайно трудны для диагностики. Несвоевременная прижизненная диагностика В-клеточной лимфомы забрюшинного пространства у пациента в описанном случае привела к отсутствию химиотерапии, что и стало причиной развития метастатического процесса и летального исхода. Поэтому практикующим врачам следует помнить об онконастороженности и быть крайне бдительными с пациентами с ВИЧ-инфекцией и количеством CD4-лимфоцитов менее 100 клеток/мкл.

In the modern context, there is an increase in the detection of HIV/tuberculosis co-infection, which makes it difficult to timely diagnose and treat complications of HIV infection and, as a result, it is the cause of death [1,2]. Today, it has been found that a high incidence of oncological diseases [3,4] is a feature of HIV infection, and HIV infection is a risk factor for B-cell lymphoma development [7,8].

So, O. A. Karnabeda et al. (2013) [3] indicate that the bone marrow involvement in HIV-infected individuals with diffuse large B-cell lymphomas are diagnosed in 25–40 % of cases, the gastrointestinal tract – in 26 %, the central nervous system – up to 57 %. It has been stated that the level of CD4 lymphocytes <100 cells/μl in HIV-infected patients is a risk factor for opportunistic infections development and death.

Following an analysis of the literature, we found only one work with a clinical case of B-cell lymphoma in a patient with HIV-tuberculosis co-infection. Moreover, tuberculosis was drug-sensitive [5]. In particular, A. A. Savin et al. (2011) describe a clinical case of systemic non-Hodgkin's lymphoma in a patient with tuberculosis and AIDS. As a result the patient died of B-cell lymphoma of multiple localization due to difficulties of timely diagnosis and treatment, but against the background of CD4 lymphocytes level >200 cells/μl.

Thus, we see that HIV infection is a risk factor for B-cell lymphoma development, which is the cause of death in patients, including the cases of drug-sensitive tuberculosis. However, there are no data on the course of HIV-associated B-cell lymphoma in patients with chemoresistant tuberculosis.

The purpose

The purpose of the work is to introduce the practitioners to the features of manifestation, diagnosis and course of HIV-associated B-cell lymphoma in a patient with multiresistant tuberculosis.

Materials and methods

The article deals with a clinical case of our own observations of the multiresistant pulmonary tuberculosis (MRTB) pro-

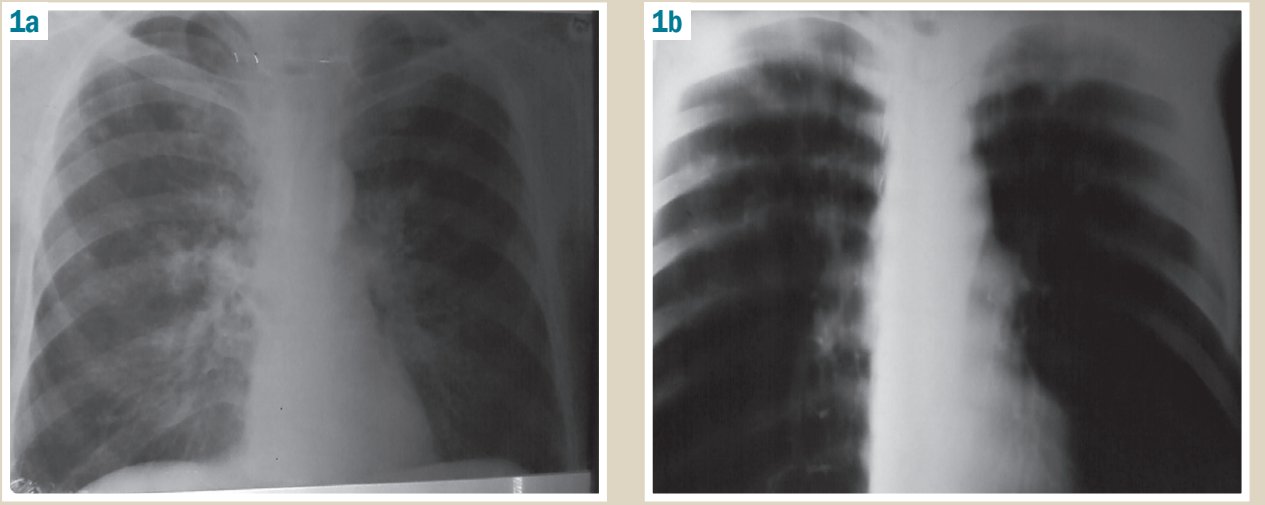

Fig. 1. a) RG OTC and **b)** TG OTC in December 2013 (before treatment).

gression in a patient with HIV-associated B-cell lymphoma. The patient underwent inpatient treatment in the Department of Pulmonary Tuberculosis No. 3 of the clinical base of the Phthisiology and Pulmonology Department of ZSMU (Zaporizhzhia State Medical University) in the Municipal Institution "Zaporizhzhia Regional TB Clinical Dispensary" (ZRTBCD), inpatient treatment in the Sophia Specialized Tuberculosis Hospital (SSTBH) № 55, branch of the "Health Center of Ukraine" in the Zaporizhzhia region.

The results of our own observations

Patient: man, 50 years old. The patient had a past history of typhoid fever in 1984 and appendectomy with peritonitis in 1989. He suffered from gastric ulcer and chronic cholecystopancreatitis for a long time and was in a dispensary for HIV infection, chronic viral hepatitis B and C at an infectious disease specialist for 13 years (2001–2013). Antiretroviral therapy (ART) was not prescribed until January 2014 (refusal of treatment by the patient). He was in SSTBH № 55 since 2011. The patient's health deteriorated considerably in December 2013 and he was transferred from SSTBH № 55 to the Municipal Institution "Zaporizhzhia Regional Center for the Prevention and Fight against AIDS" for inpatient treatment. The patient underwent additional examination. Radiography of the organs of the thoracic cavity (RG OTC) and tomography (TG) revealed focal and small focus shadows with indistinct boundaries in the upper lobes of the lungs, reduced root structure, sinuses free, heart shadow without pathology (*Fig. 1*). The level of CD4 lymphocytes was 96 cells/μl (14.3%), the viral load was 127039 RNA copies/ml. Hepatitis B antigen (HBsAg) and antibodies against hepatitis C virus (Anti-HCV) were positive. An abdominal ultrasound (US) revealed an enlargement of the retroperitoneal lymph nodes.

After consultation with an infectious diseases specialist, a phthisiologist and a neuropathologist, a diagnosis was made: Newly diagnosed pulmonary tuberculosis (NDPT) (December 2013), dissemination to the upper lung lobes. Destruction-. MBT-M-Hist 0 Category 1. Extrapulmonary tuberculosis (EPTB), tuberculosis of the retroperitoneal lymph nodes. B 20.0, IV clinical stage. Chronic hepatitis B and C (HBsAg +, Anti-HCV +). Post-traumatic encephalopathy, cerebrovascular hypertensive epileptic syndrome, psychoorganic syndrome.

Based on the data obtained and the diagnosis, the patient was transferred to the ZRTBCD.

The general blood test (GBT) revealed leukocytosis and acceleration of the erythrocyte sedimentation rate (ESR) on admission to the ZRTBCD: hemoglobin (Hb) – 120 g/l, erythrocytes (ER) – 3.8 × 10^{12}/l, color index (CI) – 0,94, leukocytes (L) – 8.1 × 10^{9}/l, ESR – 48 mm/hour, band cells – 10 % and segmented (s) neutrophils – 60%, lymphocytes (lf) – 26 %, monocytes (mon) – 4 %.

The patient was prescribed antimycobacterial therapy (AMBT) with the regimen of category 1 according to the Unified Clinical Protocol of Medical Aid (UCPMA) "Tuberculosis» [6]. However, after molecular genetic (MG) sputum tests, mycobacterium tuberculosis (MBT) was found to be rifampicin (R) – resistant.

Based on the data obtained, the patient was diagnosed with rifampicin-resistant tuberculosis (TB Reef) (January 2014), dissemination to the upper lung lobes. Destruction -. MBT-M-MG + Reef + Gist 0. Category IV (Newly diagnosed pulmonary tuberculosis (NDPT)). Cohort 1 (2014). Pulmonary insufficiency 1 stage. B 20.0, IV clinical stage. Chronic hepatitis B and C (HBsAg +, Anti-HCV +). Post-traumatic encephalopathy, cerebrovascular hypertensive epileptic syndrome, psychoorganic syndrome.

The patient was rated as category IV with the treatment correction according to the data of the drug sensitivity test (DST) and the Unified Clinical Protocol of Medical Aid (UCPMA) "Tuberculosis" [6] and prescribed both ART and prevention of opportunistic infections (Biseptol, Flucanazole, Azithromycin).

The patient continued treatment in the Department of Pulmonary Tuberculosis No. 3 (Department of Resistant Tuberculosis) in ZRTBCD – the clinical base of the Department of Phthisiology and Pulmonology of ZSMU.

CD4 lymphocytes number decreased to 58 cells/μl (16 %) after a month of treatment. MBT resistance to isoniazid (H), R and streptomycin (S) was detected based

on the results of sputum culture in liquid nutrient medium. After that, the patient was diagnosed with multidrug-resistant tuberculosis (MRTB) (February 2014) and appropriate correction of AMBT was made taking into account the new data of DST and UCPMA "Tuberculosis" [6].

The patient had a positive X-ray dynamics in the form of condensed foci on the background of moderate local fibrosis in the upper left lobe without any features on the right after 2 months of pulmonary MRTB treatment. In the GBT, only the ESR acceleration was noted, which was 2 times lower compared to the admission rate (48 mm / hour): Hb – 122 g/l, ER – 3.8 × 10^{12}/l, CI – 0.99, L – 5.1 × 10^{9}/l, ESR – 26 mm/hour, band cells – 2 %, s – 54 %, lf – 39 %, mon – 3 %, eosinophils (ef) – 2 %.

The level of CD4 lymphocytes remained extremely low: 32–35 cells/μl (13–16 %) for 6 months of AMBT and ART.

The patient underwent an ultrasound examination of the hepatobiliary system (September 2014) on the 7th month of treatment. Medical conclusion: echo signs of hepatomegaly, diffuse induration of the liver with signs of portal hypertension (as cirrhosis). Positive dynamics was observed on the RG OTC (*Fig. 2*) in the form of dense foci: moderate increase in pulmonary vascularity in the upper lobes of the lung, single small dense foci, the roots were structured, the sinuses were free, there were no the heart abnormalities.

Bacterial excretion was not observed and the positive dynamics was demonstrated radiographically in the form of lesions consolidation during 8 months of the intensive phase of pulmonary MRTB treatment. The patient tolerated AMBT and ART satisfactorily. On this evidence, he was prescribed the maintenance phase of pulmonary MRTB treatment. The viral load level was <40 RNA copies, but the number of CD4 lymphocytes remained extremely low: 64 cells / μl (14 %).

The patient's condition worsened after 2 months of the maintenance phase of pulmonary MRTB treatment (December 2014). Complaints of severe shortness of breath at rest, dizziness, severe weakness, body temperature rise to 37.2 °C appeared. The RG OTC illustrated the following changes: oblique fluid level to the diaphragm was determined left of the anterior segment of the 3rd rib, mediastinal organs were sharply shifted to the right.

Pleural puncture was performed and 2000 ml of serous exudate was obtained. Pleural fluid analysis: color – brownish red, the exudate was turbid and bloody, specific gravity – 1014, protein – 33 g/l, Rivalta test – positive, red blood cells – all fields of view, white blood cells – 0-1-2 in field of view, MBT not detected. There were separate large cells with an increased in size and number of nucleoli in the nuclei.

The obtained data indicated the need for differential diagnosis in the patient with oncopathology. However, given the patient's health state severity, a consultation with an oncologist in the oncologic dispensary was postponed until the process stabilization.

An ultrasound of the hepatobiliary system was performed (December 2014). Conclusion: echo signs of hepatomegaly, focal mass in the left liver lobe (segment 4) – hemangioma? Echo signs of functional folded gallbladder.

There were negative changes in the RG OTC due to free fluid accumulation in the left pleural cavity after 3

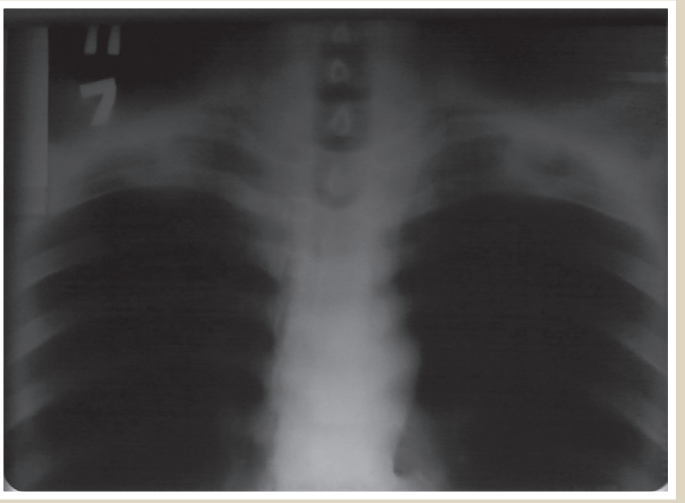

Fig. 2. Pulmonary TG after 7 months of pulmonary MRTB treatment.

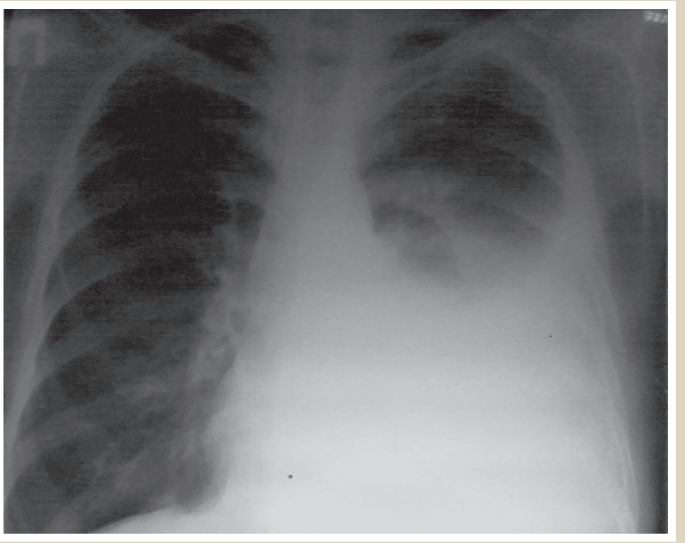

Fig. 3. RG OTC after 3 months of the maintenance phase of pulmonary MRTB treatment.

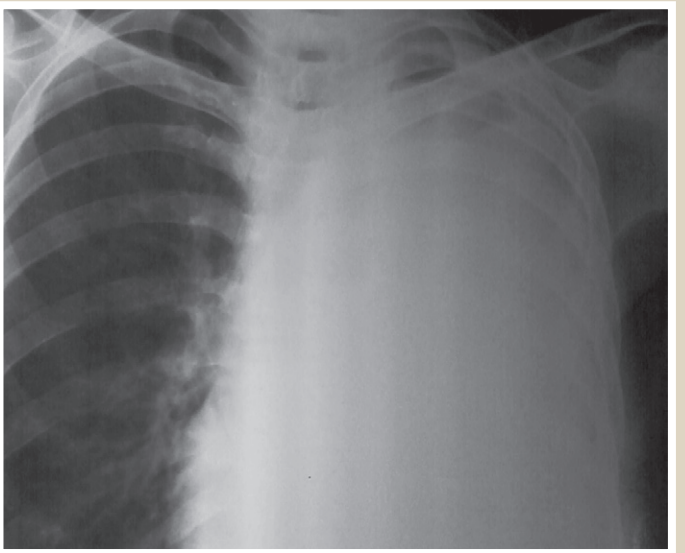

Fig. 4. RG OTC after 7 months of the maintenance phase of pulmonary MRTB treatment.

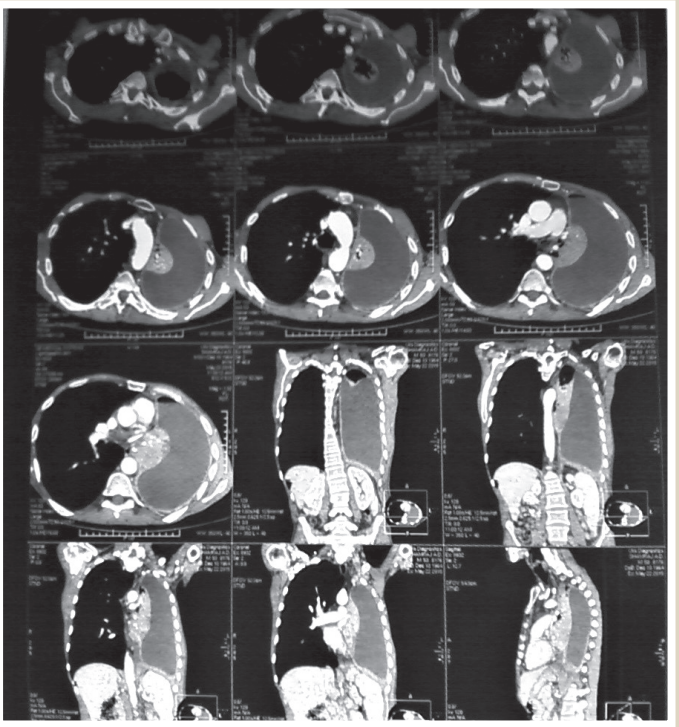

Fig. 5. CT OTC after 7 months of the maintenance phase of pulmonary MRTB treatment.

months of the maintenance phase of pulmonary MRTB treatment (*Fig. 3*).

A fibrobronchoscopy (FBS) of the tracheobronchial tree revealed no pathology. The number of CD4 lymphocytes remained extremely low: 96 cells/μl (13.8 %).

Repeated pleural puncture was performed. The results of the pleural fluid analysis remained the same and unchanged.

GBT: Hb – 122 g/l, ER – 3.75×10^{12}/l, CI – 0.99, L – 9.7×10^{9}/l, ESR – 40 mm/hour, band cells – 3 %, s – 77 %, lf – 16 %, mon – 3 %, ef – 0 %.

On the electrocardiogram: diffuse dystrophic changes in the myocardium.

Conclusion of the therapist after 7 months of the maintenance phase of pulmonary MRTB treatment: Pleural mesothelioma on the left. Metabolic cardiomyopathy. First degree of cardiac failure (CF). Third degree of pulmonary insufficiency (PI). Chronic hepatitis B and C. Encephalopathy of mixed genesis. Anemia of the chronic disease. Cachexia. B 20.0, associated nephropathy.

The accumulation of free fluid in the left pleural cavity continued despite the ongoing therapy and pleural puncture. RG OTC (*Fig. 4*) showed intensive density in the left hemithorax, a large amount of free fluid, increase in pulmonary vascularity on the right in the middle pulmonary field, the mediastinal organs were shifted to the right.

The patient was referred to the oncologic dispensary for further examination after 7 months of the maintenance phase of treatment. Computer tomograms (CT) of the OTC and abdominal organs (AO) were performed.

CT scan of the OTC (*Fig. 5*) showed CT scan signs of atelectasis of the left lung and left-sided hydrothorax of a neoplastic nature.

On CT scan of AO showed (*Fig. 6*) CT-signs of a single focus in the left hepatic lobe, retroperitoneal lymphadenopathy of a neoplastic nature, cyst in the right hepatic lobe.

The oncologist's conclusion: Mts pleurisy on the left, st IV gr II.

X-ray dynamics remained negative due to an increase in the amount of free fluid in the left pleural cavity (*Fig. 7*): intensive density in the left hemithorax, a large amount of free fluid, increase in pulmonary vascularity on the right in the middle pulmonary field, the mediastinal organs were shifted to the right.

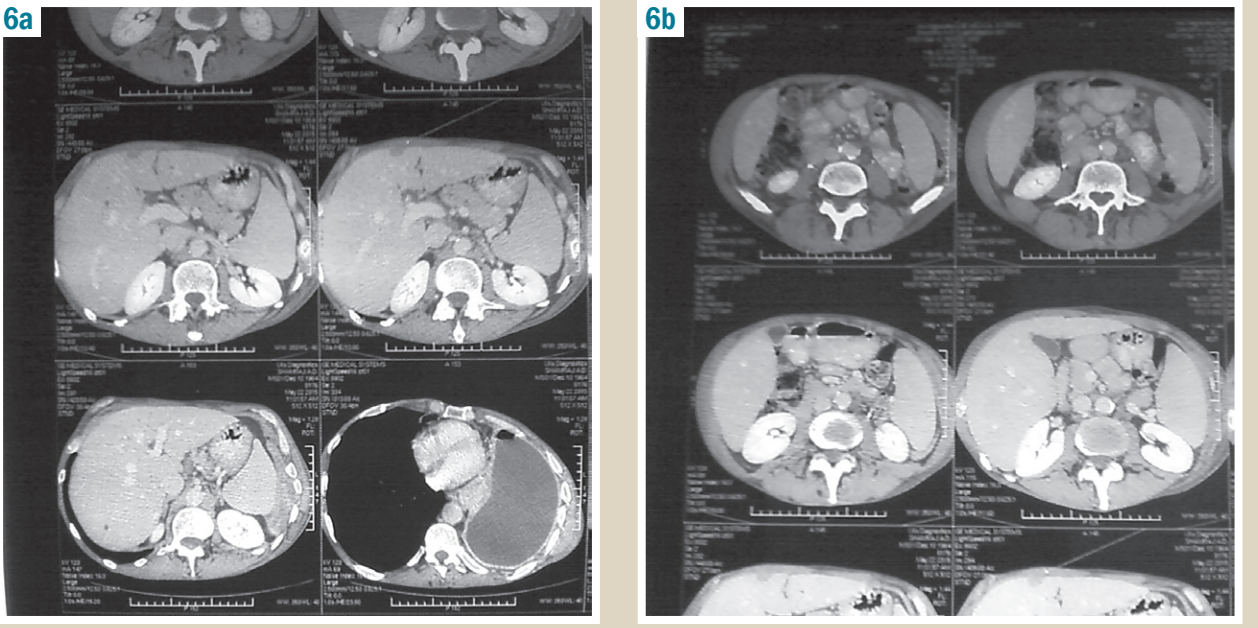

Fig. 6. CT AO after 7 months of the maintenance phase of pulmonary MRTB treatment.

The number of CD4 lymphocytes: 133 cells/μl (15 %). GBT: Hb – 112 g/l, ER – 3.5 × 10^{12}/l, CI – 0.96, L – 8.2 × 10^{9}/l, ESR – 30 mm/hour, band cells – 7 %, s – 76 %, lf – 6 %, mon – 10 %, ef – 1 %.

On July 2015, the patient completed the main course of AMBT with category IV regimen according to the provisions established by the UCPMA "Tuberculosis" [6] and based on the positive clinical X-ray dynamics. At the same time, the patient continued to be in the Department of Pulmonary Tuberculosis No. 3 of the ZRTBCD of the clinical base of the Department of Phthisiology and Pulmonology of ZSMU due to the general condition severity.

The patient received the comprehensive treatment during inpatient stay in the hospital: AMBT with the category IV regimen taking into account the DST data, ART, prevention and treatment of opportunistic infections (Biseptol, Flucanazole, Azithromycin), symptomatic and detoxification therapy. The patient was under regular supervision of an infectious diseases specialist and therapist.

The patient's condition deteriorated considerably despite the ongoing therapy (ART, symptomatic and detoxification) in September 2015. The patient categorically refused to be transferred to the Anesthesiology and Intensive Care Unit. The patient's biological death was pronounced on September 17, 2015.

The post-mortem diagnosis was determined: B 22.7, 4 clinical stage. Chronic hepatitis B and C (HBsAg +, Anti-HCV +). Oropharyngeal candidiasis. Multiple organ failure. Liver disease with Mts in the retroperitoneal lymph nodes and pleura on the left, st VI, gr II. MRTB (February 2014) dissemination to the upper lung lobes. Destruction-. MBT-M-MG + Reef + K-Resist (HRS). Gist 0. Category IV (NDPT). Stage 3 of pulmonary insufficiency (PI). IIB stage of CF. Anemia of the chronic disease. Cachexia. Post-traumatic encephalopathy, epileptic syndrome associated with intracranial hypertension, psychoorganic syndrome.

Pathoanatomical diagnosis:

1. *The main disease.* HIV infection IV clinical stage (according to clinical data). Retroperitoneal B-cell lymphoma with foci of hemorrhage and necrosis and extension into the surrounding adipose tissue, metastases to the lungs, liver, parietal pleura and abdominal lymph nodes. Disseminated pulmonary tuberculosis: multiple foci of specific productive inflammation, represented by epithelioid cells, macrophages, lymphocytes, the presence of giant Pirogov–Langhans cells and centrally located caseous necrosis. Histology +. Chronic viral hepatitis B and C: protein and fatty hepatocellular degeneration, foci of moderate macrophage and lymphocyte infiltration at the periportal areas. Oropharyngeal candidiasis. HIV-associated cardiomyopathy.

2. *Complications.* Pulmonary alveolar-interstitial edema (weight of the right lung – 600 g, left lung – 670 g). Bilateral hydrothorax (right-sided pleural effusion – 300 ml, left-sided – 1200 ml). Endogenous intoxication: focal renal tubular necrosis, centrolobular hepatic necrosis. Hyaline dystrophy of the renal tubular epithelium. Parenchymal dystrophy of internal organs. Cachexia.

3. *Concomitant diseases*. Chronic superficial gastroduodenitis in the acute stage. Chronic pancreatitis in the non-acute stage.

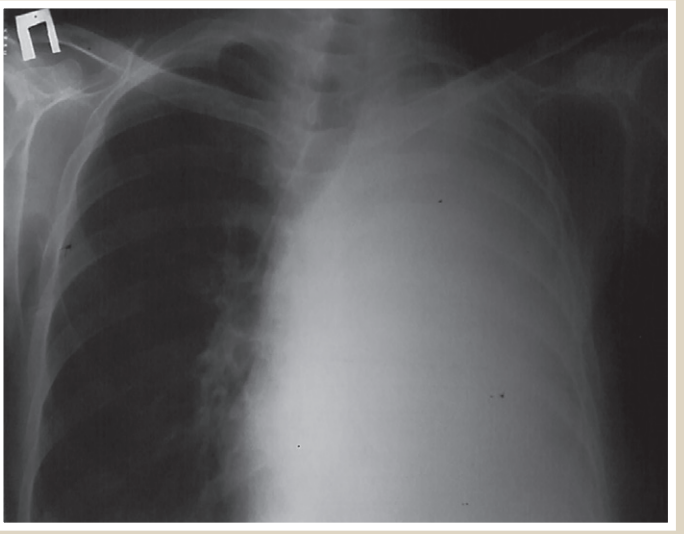

Fig. 7. RG OTC after 9 months of the maintenance phase of pulmonary MRTB treatment.

Discussion

The patient was in a dispensary under the care of an infectious diseases specialist for 13 years with a clinical diagnosis: HIV infection, chronic viral hepatitis B and C. For all that, ART was not prescribed, since the patient refused it. As we can see from the presented data, against the background of HIV infection, the patient developed retroperitoneal B-cell lymphoma, which was initially interpreted as tuberculosis of the retroperitoneal lymph nodes and was diagnosed only at autopsy. Additionally, pulmonary MRTB, chronic viral hepatitis B and C were occurred. Despite the effective antimycobacterial therapy for pulmonary MRTB, metastatic lesions of the lungs, liver, parietal and visceral pleura, abdominal lymph nodes, development of bilateral exudative pleurisy with a hemorrhagic component complicated the progressive course of oncologic disease. Given the situation, multiple organ failure developed and progressively increased with severe endogenous intoxication, which caused the death, due to the progressive course of cancer against the background of HIV infection with an extremely low number of CD4 lymphocytes (<100 cells/μl), as well as pulmonary MRTB.

Research data of O. Landgren et al. (2010) [7] and J. J. Castillo et al. (2010) [8] suggest that HIV infection is a risk factor for diffuse B-cell lymphoma development. In this view, the study of J. J. Castillo et al. (2010) [9] showed that the absence of antiretroviral therapy for HIV infection is an unfavorable prognostic factor for diffuse B-cell lymphoma development. Considering our patient data, the absence of antiretroviral therapy for 13 years provoked retroperitoneal B-cell lymphoma development, which is confirmed by the results of J. J. Castillo et al. (2010) [8].

At the same time, our patient had extremely low number of CD4 lymphocytes both at admission and throughout the inpatient treatment in the ZRTBCD (<100 cells/μl), which caused the patient to develop such an opportunistic disease as pulmonary MRTB, and subsequently, death from retroperitoneal B-cell lymphoma. Such a course of the disease confirms the data of O. A. Karnabeda et al. (2013) [3].

Conclusions

The lack of timely treatment of HIV infection (antiretroviral therapy) is associated with opportunistic diseases, severe complications development that occur in the guise of any other pathology, and consequently are extremely difficult to diagnose. The untimely lifetime diagnosis of retroperitoneal B-cell lymphoma in the described case resulted in a lack of chemotherapy, which caused the metastatic process development and death of the patient. Therefore, practitioners should always be aware of oncology, and be more vigilant with HIV-infected patients whose CD4 count of less than 100 cells/μl.

Prospects for further research. Further study and analysis of clinical cases of tuberculosis combined with other diseases.

Conflicts of interest: authors have no conflict of interest to declare.
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