

PULMONARY DISSEMINATION SYNDROME IN CLINICAL PRACTICE

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Relevance. Pulmonary dissemination syndrome is an X-ray syndrome characterized by the appearance of multiple focal opacities and/or strengthening and mesh deformation of the pulmonary pattern of bilateral localization. Diagnosis of diseases with pulmonary dissemination syndrome presents great difficulties. Similarities between tuberculosis and lung cancer include fever, cough, expectoration, hemoptysis, loss of appetite, and weight loss [1]. Unfortunately, many people with lung cancer are initially misdiagnosed as having tuberculosis because of the high incidence of TB and the similarities in their radiological presentations. Literature reviews imply that misdiagnosis of pulmonary tuberculosis as lung cancer results in both a delay in the correct diagnosis and the administration of inappropriate medication to the patient [1].

Object. A case of multiple metastases in the lungs which simulated subacute disseminated tuberculosis is presented.

Research methods. The patient felt herself ill since 12/15/22, when an increased body T and a dry cough appeared. From 12/15/22 to 12/21/22 she was observed by a local therapist in a polyclinic. She received treatment: acetylcysteine, euphyllin, azithromycin, amoklav. Condition without improvement. General weakness, shortness of breath, cough with mucous sputum increased. 12/29/22 X-ray examination of the chest revealed changes in the lungs.

Results and discussion. The patient was hospitalized at the GRCC “Phthiology” for further diagnosis and treatment.

Condition at the time of admission: General condition is severe.

01/02/23 blood test: WBC 10,46·10⁹/l; Hb 127 g/l; ESR 56 mm/h;

12/29/22 Procalcitonin 0,15 ng/ml

Bacterioscopy MBT sputum smear – AFB not found

12/29/22 BACTEK negative result

12/29/22 GeneXpert – MBT DNA not found

12/29/22 COVID-19 Ag Rapid Test – negative

12/30/22 PCR Test на SARS-Cov-2 – negative

12/30/22 – microbiological examination of sputum was done, & results came on 01/02/23 and revealed moderate growth of yeast-like fungi of the genus Candida

12/29/22 Chest X-ray: Signs were more suggestive for bilateral caseous pneumonia. Differential diagnosis head between Sarcoidosis & Infiltrative tuberculosis.

12/29/22 CT thorax picture: multiple nodular structures in the both lungs were detected, the most typical for secondary changes. As differential diagnostics, include inflammatory or granulomatous changes in the lungs.

12/30/22 FBS: bilateral purulent bronchitis.

12/30/22. CT of chest- multiple nodular structures of the lungs.

12/30/22 Ultrasound of internal organs Conclusion: Ultrasound signs of enlarged liver, diffuse changes in the liver, pancreas, RS cyst.

12/30/22 Consultation – gynecologist: Differential diagnostics between Uterine fibroids and some Pathology of the endometrium.

12/30/22 Ultrasound of pelvis: ultrasound signs depict differential diagnostics between endometrial hyperplasia or Myoma of the body of the uterus.

12/30/22 Consultation of a thoracic surgeon: A patient is not registered with the oncology consultation. A picture of a disseminated process in the lungs.

12/30/22-Consultation for Diagnosis: Pulmonary dissemination syndrome of unknown etiology (lung carcinoma, disseminated pulmonary tuberculosis or mild focal pneumonia) ARDS of moderate severity. Respiratory failure-Type 2. Bilateral hydrothorax. Arterial hypertension Type 2. Type 2 diabetes mellitus (sub-compensation stage), Obesity class 2. (BMI- 40.86 kg/m²)

01/03/23. Ultrasound of the pelvic organs: Lead to differential diagnosis between signs of endometrial hyperplasia or Myoma of the body of the uterus.

01/03/23, 01/12/23: – sputum for AK – atypical cells were not detected

01/03/23 – vaginal smear for AK – atypical cells were not detected

01/04/23 CT examination of the abdominal cavity, small pelvis: CT picture of the formation of the body of the uterus with the spread to the cervical region. Enlarged LN of the pelvis.

01/05/23 Cytological examination of a fragment of the left lung – revealed Multiple secondary changes in the lung parenchyma at a visible level, blood elements in smears, occasionally histiocytes, single groups of prismatic epithelium, without signs of atypia.

01/06/23 Consultation – gynecologist: Differential diagnostics lead to cancer of the body of the uterus or MTS in LU of the pelvis.

01/06/23 Pathological examination of a fragment of the left lung – the material is represented by fibromuscular tissue.

01/09/23: MRI of the small pelvis: signs of additional tissue formation of the body and cervix with spread to the parametrium on the right and involvement of the posterior wall of the bladder. Changes in the pelvic bones do not allow to exclude the secondary character.

01/10/23. Chest X-ray in comparison with Chest X-ray from 12/29/22 without significant dynamics, more confluent focal shadows appeared in the lower sections (pneumonia was taken as a possible diagnosis).

01/11/23 Microbiological examination of sputum: *Klebsiella pneumoniae* 106 CFU/ml; multi-resistant strain.

01/11/23 Histopathological examination of aspirated from the uterine cavity: bloody masses, among a fragment of fibrous tissue, complexes of invasive carcinoma are closer to squamous cell without keratinization, G 2-3. The material is extremely scarce. The patient needed to be further examined.

On January 14, 2023: at 18:09: Biological death was declared.

Postmortem diagnosis: Primary: Malignant neoplasm of the cervix, vaginal parametric variant involving the posterior wall of the bladder. Multiple metastases in the lungs, metastases in the nodes of the pelvis, in the bones of the skeleton. T3N1M1 G 3, stage: IV, clinical group: II. Complication: ARDS. Severe bilateral hydrothorax. Respiratory failure 3. Concomitant: Bilateral polysegmental pneumonia. Arterial hypertension grade 2, risk 4. Type 2 diabetes mellitus (sub-compensation stage). Obesity Type 2. (BMI – 40.86 kg/m²). Left kidney cyst. Secondary chronic interstitial nephritis in the stage of incomplete remission. Angiopathy of the retina OU. Oral candidiasis. Lymphopenia

Conclusions. The presented clinical observation demonstrates the difficulties of differential diagnosis of pulmonary dissemination syndrome. This instance emphasizes the need for distinguishing between tuberculosis and pulmonary metastases of primary cancer. Oftentimes, radiological and screening manifestations of these diseases look very similar to one another. The main decision in the proper diagnosis belongs to the morphological methods of verification.

ЛИТЕРАТУРА

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