

# A rare course of total pleural empyema with contralateral breast involvement: pathogenetic aspects and clinical findings

**M.S. Opanasenko, O.V. Tereshkovych, B.M. Konik, A.M. Stepaniuk, V.I. Lysenko, Yu.M. Maietnyi, O.M. Fashchuk, Ya.S. Stavyska, L.I. Levanda, O.D. Shestakova, V.I. Zinchenko, I.P. Nechaenko**

SI "National Scientific Center of Phthisiology, Pulmonology and Allergology named after F.G. Yanovsky of the NAMS of Ukraine", Kyiv, Ukraine

**Conflict of interest:** none

**ABSTRACT.** The presented clinical case is of significant practical interest in the context of managing patients with systemic purulent-septic complications on the background of a polymorbid condition and socially determined risk factors. The case involves a total left-sided pleural empyema complicated by the formation of a right breast abscess, likely due to hematogenous dissemination of pathogenic flora. The patient had a history of intravenous psychoactive substance use and was undergoing opioid substitution therapy – a key contextual factor, given the immunosuppressive and metabolically depleting nature of addiction. The diagnostic and therapeutic strategy adhered to the principles of modern thoracic surgery: an early minimally invasive intervention was performed – video-assisted thoracoscopic surgery with pleural cavity decompression and drainage. Special attention is warranted for both intraoperative and postoperative management, which was complicated by the development of severe normocytic anemia, necessitating transfusion therapy in accordance with patient blood management protocols. This case underscores the necessity for a personalized, multidisciplinary approach to the treatment of surgical infections in patients with impaired immune homeostasis, destabilizing social determinants, and elevated risk of infectious complications.

**KEY WORDS:** pleural empyema, chest wall abscess, hematogenous dissemination, maintenance therapy, video-assisted thoracoscopy.