

CLINICAL CASES OF VATS-RESECTION OF THE TENDON CENTER OF THE DIAPHRAGM WITH DEFECTS AND PARIETAL PLEURECTOMY IN THE TREATMENT OF CATAMEAL PNEUMOTHORAX DUE TO ENDOMETRIOSIS IN WOMEN

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Abstract

Catamenial pneumothorax (CP) is a type of spontaneous pneumothorax (SP), which occurs only in women and is most often caused by endometriosis of extragenital localization. CP occurs in the period 24 hours before the onset and 72 hours after the onset of menstruation. CP affects women of reproductive age. Thoracic endometriotic syndrome with diaphragm defects occurs in 29–66 % of patients.

It is not known for certain due to which organ defect CP occurs: it is believed that these may be holes in the tendon part of the diaphragm, but the theory of a defect in the lung parenchyma as a result of the proliferation of endometrial nodes is not rejected.

In 20–30 % of cases, according to histological studies, bullous lesions in the lung parenchyma were also detected in women with CP.

There are several approaches to the treatment of CP: hormonal therapy, drainage of the pleural cavity. Increasingly, CP is managed by resection of the affected part of the diaphragm supplemented with one of the pleurodesis methods.

The *aim* of our work is to acquaint the physicians of various specialties with the clinical experience of using VATS-resection of the tendon center of the diaphragm with defects and parietal pleurectomy in the treatment of CP due to endometriosis in women. In the surgical departments of the SO "National scientific center of phthiology, pulmonology and allergology named after F. G. Yanovsky NAMS of Ukraine" in the period from 2013 to 2025, 27 women with CP were treated.

The managing algorithm for SP in women in our clinic are as follows: if there are no contraindications, then VATS is performed on the affected side for everyone without exception following chest CT. In the presence of bullous lesions in the lung parenchyma (diagnosed either before surgery or intraoperatively), a lung resection is performed with subsequent histological examination. When diaphragm defects are detected, they are sutured with purse-string sutures or sutures with the formation of duplication. In all patients with recurrent CP, the operation is supplemented with subtotal pleurectomy and chemical pleurodesis in the interlobar spaces and on the diaphragm.

In this publication we presented two cases where we used VATS-resection of the tendon center of the diaphragm with defects and parietal pleurectomy.

A multidisciplinary approach to the treatment of CP, namely, a combination of surgical treatment and adequate hormone therapy, is the most effective method of the management of this condition.

Based on our observations, it was the minimally invasive approach that provided the least amount of residual changes (subjective and objective), while maintaining the maximum radicality of the operation and prevention of recurrent pneumothorax, and also allowed the diagnosis of endometriosis to be established.

Key words: catamenial pneumothorax, VATS, diaphragm resection, parietal pleurectomy.

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