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POLISH GYNECOLOGY
GINEKOLOGIA POLSKA
ORGAN POLSKIEGO TOWARZYSTWA GINEKOLOGICZNEGO
THE OFFICIAL JOURNAL OF THE POLISH GYNECOLOGICAL SOCIETY

ISSN: 0017-0011

e-ISSN: 2543-6767

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DOI: 10.5603/gpl.99110

Article type: Clinical vignette

Submitted: 2024-01-25

Accepted: 2024-04-13

Published online: 2024-07-12

CLINICAL VIGNETTE

Thoracic endometriosis complicating pregnancy

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INTRODUCTION

Endometriosis, a chronic, estrogen-dependent inflammatory condition, is characterized by the presence of endometrial-like tissue outside the uterus. Predominantly affecting 5–10% of women of reproductive age, its symptoms, primarily pelvic pain and infertility, can significantly diminish quality of life [1]. While endometriosis typically involves pelvic organs, it can manifest systemically, affecting multiple organs and systems [2]. A particularly rare manifestation is thoracic endometriosis syndrome, characterized by the presence of ectopic endometrial tissue in the thoracic cavity, potentially leading to catamenial pneumothorax, haemothorax, haemoptysis, and pulmonary nodules [3, 4]. Due to its rarity, thoracic endometriosis is often underdiagnosed, delaying effective management, which typically involves hormonal suppression and surgical interventions [4].

CASE PRESENTATION

A 32-year-old pregnant woman (16 weeks of gestation, gravida 2, para 1) presented at the Emergency Unit of University Hospital in Cracow with suspected right-sided spontaneous pneumothorax. She reported dyspnoea, coughing, and pain since the previous morning. Her medical history included multiple instances of spontaneous pneumothorax and a diagnosis of pelvic and diaphragmatic endometriosis. She had previously undergone video-assisted thoracoscopy (VATS), right lung wedge resection, partial diaphragmatic resection with reconstruction, pleurectomy, and was on dydrogesterone therapy (Fig. 1). Chest X-ray

revealed a small pneumothorax (~12 mm), managed conservatively without drainage following thoracic surgical consultation (Fig. 2). The patient was admitted to the Obstetrics Department for observation, where she remained stable over seven days, ultimately being discharged with resolved thoracic symptoms. At 39 weeks of gestation, the patient was readmitted for scheduled caesarean section due to thoracic indications. A healthy male infant was delivered. Intraoperative findings included diffuse endometriosis foci on the anterior uterine fold and adnexa and adhesions involving the intestines and the rectum-uterine wall.

DISCUSSION

Thoracic endometriosis during pregnancy is an exceedingly rare clinical entity. It can manifest similarly to non-pregnant cases, including pleural effusions and pneumothoraces [4]. Thoracic ectopy is the most common site of endometriosis outside of the abdominopelvic cavity, but managing this condition in pregnant patients is challenging due to the limited understanding and literature regarding endometriosis outside the reproductive system [5]. Thoracic ectopic endometriosis represents a significant proportion (3–6%) of spontaneous pneumothorax cases in women [4]. The rarity of this condition contributes to delayed diagnoses and frequent misdiagnoses. Management strategies focus on addressing acute presentations and preventing recurrences through hormonal or surgical interventions [4]. This case study highlights the clinical rarity and complexity of thoracic endometriosis, particularly during pregnancy, which is conventionally believed to ameliorate endometriosis symptoms. It underscores the importance of considering this diagnosis in pregnant patients presenting with respiratory symptoms and a history of endometriosis. Preconceptual counselling is imperative to educate women about potential risks and adverse outcomes associated with thoracic endometriosis during pregnancy.

Article information and declarations

Ethics statement

No ethical conflict.

Author contributions

Hanna Rodak — 50%: study design, correspondence author, concept, atricle raft, acquisition of data.

Magdalena Kołak — 20%: revised article critically.

Andrzej Jaworowski — 20%: revised article critically.

Hubert Huras — 10%: revised article critically.

Acknowledgments

None.

Conflict of interest

The authors declare no conflict of interest.

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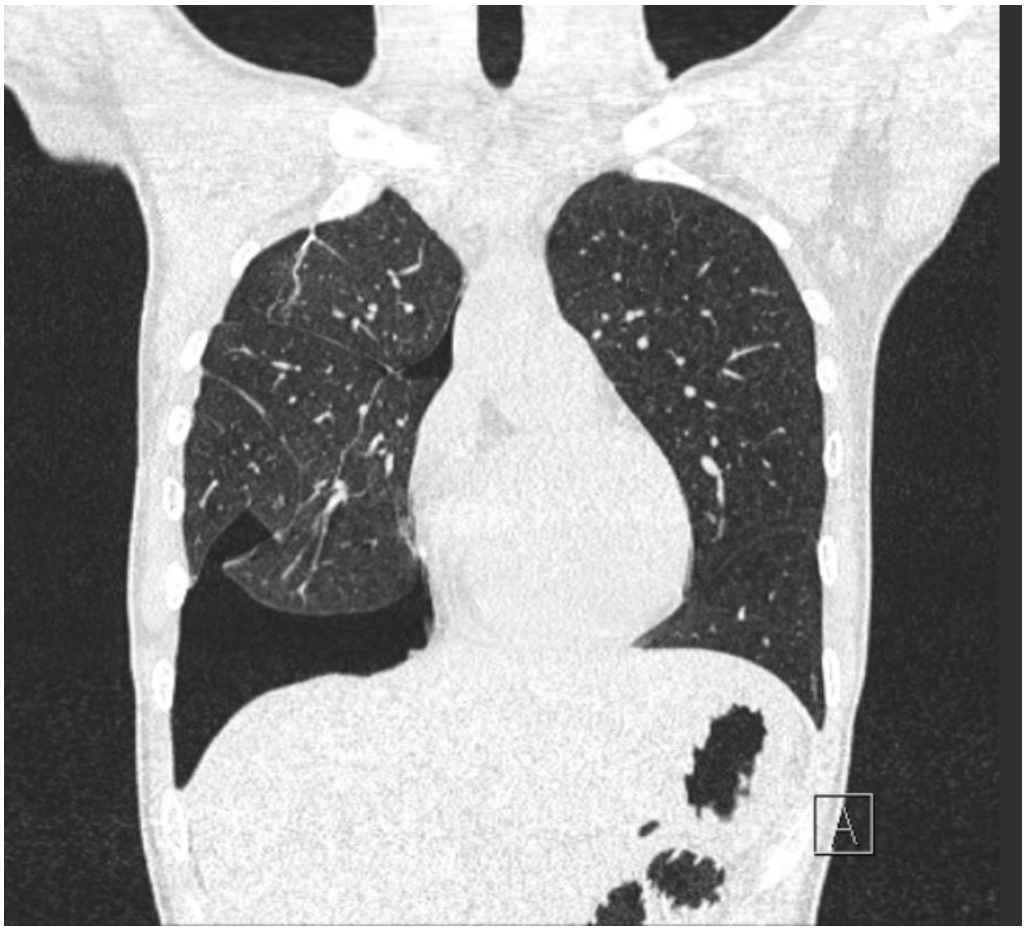

Figure 1. Computed tomography (CT) of the patient's chest performed one year prior to the admission

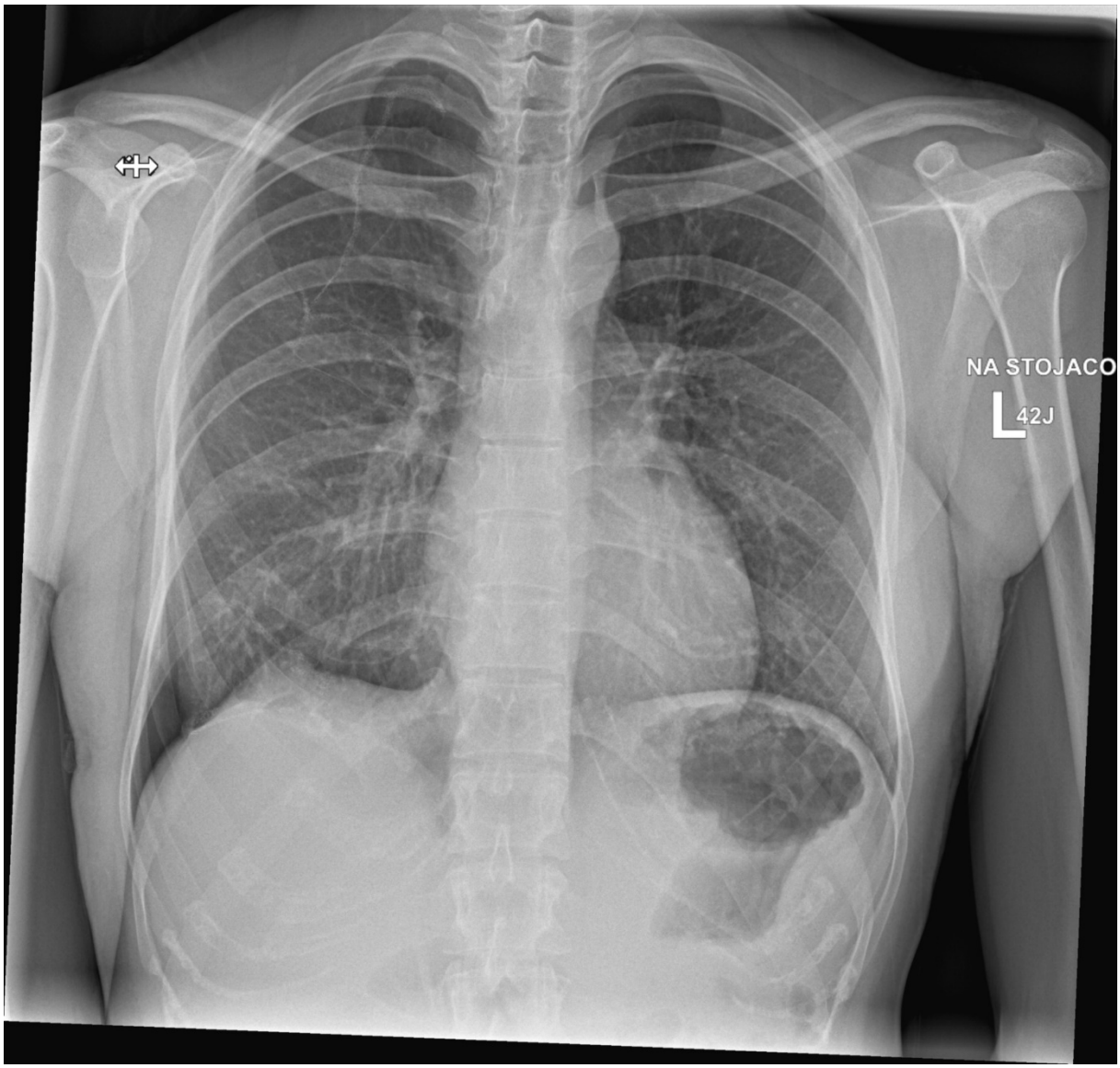

Figure 2. X-ray of the chest performed after admission to the Emergency Department