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Case report

Fistula formation between infected pelvic lymphocele and sigmoid colon: A rare complication of pelvic lymphadenectomy

Soukaina Alliou, Resident in Radiology*, Sanae Sninate, Resident in Radiology, Hounayda Jerguigue, Specialiste in Radiology, Rachida Latib, Professor in Radiology, Youssef Omor, Professor assistant in Radiology

Radiology Department, National Institute of Oncology, Mohammed V University in Rabat, Rabat, Morocco

ARTICLE INFO

Article history:

Received 24 December 2020

Revised 30 December 2020

Accepted 2 January 2021

Keywords:

Lymphocele

Sigmoid

Fistula

CT

ABSTRACT

Lymphocele formation following pelvic lymphadenectomy is a well-known complication. In this article, we report a 56 years old female patient with a pelvic infected lymphocele fistulised in the sigmoid discovered in imaging 2 months after pelvic surgery. Lymphocele complications are rare and their diagnosis is based on imaging. However, lymphocele as a potential cause for fistula in the bowel as a particular new case has not been found in literature search.

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Introduction

Lymphocele is a common complication of pelvic lymphadenectomy for patients presenting oncological conditions [1,2]. The majority of lymphoceles remains asymptomatic, though a certain number of patients can present abdominal pain, deep vein thrombosis or lower urinary tract problems. Asymptomatic lymphoceles might be infected few months after the surgery [3]. In this case, we report an unusual presentation of infected pelvic lymphocele developing after radical

hysterectomy where the patient developed a fistula between the sigmoid and the lymphocele.

Case report

A 56-year-old lady with a history of radical hysterectomy, bilateral adnexectomy and pelvic lymph node dissection for cervical epidermoid carcinoma 2 months earlier, presented to our department for pain and abdominal distension, with

* Corresponding author.

E-mail addresses: alliou.sou@gmail.com (S. Alliou), sninate.sanae@gmail.com (S. Sninate), jerguiguehounayda@gmail.com (H. Jerguigue), rachidalatib@gmail.com (R. Latib), omor.youssef3@gmail.com (Y. Omor).
<https://doi.org/10.1016/j.radcr.2021.01.001>

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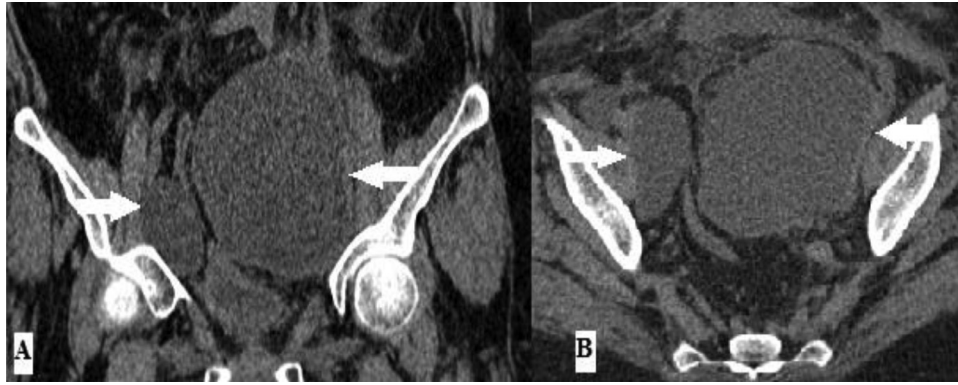


Fig. 1 – (A) coronal and (B) axial images of nonenhanced pelvic CT showing bilateral lymphoceles.

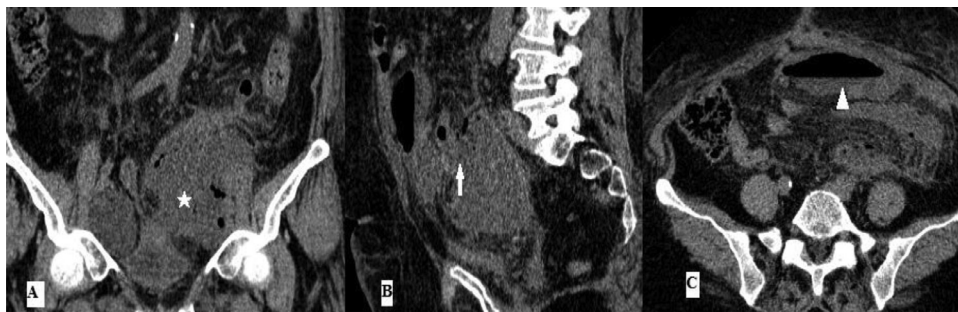


Fig. 2 – CT-scan images, achieved a week after, demonstrated an infected lymphocele, containing air bubbles (star) (A), fistulised in the sigmoid (arrow) (B) and a peritoneal collection (head of arrow) (C).

no significant abnormalities at physical examination. An abdominopelvic CT showed bilateral pelvic fluid collections consistent with lymphoceles, the left one had a close contact with the sigmoid (Fig. 1). The patient was put on symptomatic treatment. Following the worsening overall conditions and the emergence of signs of infection a week after the first imaging, another CT was performed, showing the emergence of thickened wall of the left lymphocele, which presented discontinuities in certain locations, and it was containing air bubbles demonstrating the presence of a fistula between the abscessed collection and the sigmoid (Fig. 2). This was associated to a collection with air-fluid level adjacent to a small bowel, a small amount of free fluid in the intraperitoneal cavity, together with densification of fatty adjacent planes which consist with peritonitis. Three days after surgery, the CT scan of our patient showed the resolution of the infected lymphocele (Fig. 3).

Discussion

Pelvic lymphocele is an abnormal collection of lymphatic fluid, considered as a sequelae of pelvic lymphadenectomy, occurring after surgical treatment of gynaecologic, urological malignancy or also renal transplantation surgery [4]. Their high incidence in the lower lumbar surgeries is due to the



Fig. 3 – CT scan achieved 3 days after surgery, shows the prompt regression of the infected lymphocele.

richness of this area of lymphatic channels. The formation of those collections may be improved by certain factors, such the number of lymph nodes excised [5,6], lack of lymph vessel's ligation [7], the extent of lymphadenectomy [8–10], the use of anticoagulants and radiotherapy [11,12]. The use of prophylactic antibiotics, the retroperitoneal suction drainage and the achievement of well-defined dissection boundaries, allow limiting the formation of those collections [12–14]. LCs are detectable in 3 to 8 weeks postoperatively, but could ap-

appear a year after surgery, which leads to suspect a recurrent disease [15]. Frequently, they are asymptomatic and disappear spontaneously. In 5 to 10% of patients, LCs may be the cause of numerous complications which are often related to the compression on neighbouring structures, like rectum, bladder, ureters, and large vessels, giving rise to constipation, prolonged ileus, hydronephrosis, pain or DVT [15–21]. The presence of LCs could also promoting the emergence of a secondary septic process, which amplifies the mechanical role of contaminated collections (abscesses) and be likely responsible of the occurring of fistula between the lymphocele and the sigmoid as the case of our patient. This complication is very rare and has never been reported.

Ultrasonography, MRI and especially CT scan permit the diagnosis of lymphoceles as well as their eventual complications may, which enable an early treatment [22]. The differential diagnosis of this collection comprise hematoma abscess, urinoma, seroma, and a cystic neoplasm.

The treatment of symptomatic and/or complicated lymphoceles could be favourably completed by catheter drainage with or without sclerotherapy, ultrasonography or CT scan-guided percutaneous aspiration. As a substitute, laparoscopic drainage or open surgery could be achieved. Asymptomatic and small lymphoceles may be followed with no need to be treated [23].

Conclusion

lymphocele is a sequela of pelvic surgeries and represents a statistical risk factor for the occurrence of certain delayed complications as infection and fistula. Ultrasonography and CT scan are considered as the cornerstone of the diagnosis and may intervene as a treatment in some cases.

Patient Consent Statement

The patient declares his consent for the publication of his case.

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