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Septic arthritis of the postpartum pubic symphysis associated with ovarian vein thrombosis

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Summary

Pubic symphysitis is a rare pathology found in the postpartum and is still exceptionally associated with thrombosis of the ovarian vein on the same side. His diagnosis would be very difficult in this period. It is necessary to evoke it in front any atypical pubic pain in its presentation or in its evolution all the more as it is associated with a fever.

We report a rare case of septic arthritis of the pubic symphysis associated with thrombosis of the right ovarian vein occurring in early postpartum. The diagnosis was difficult. Heparinotherapy and appropriate prolonged antibiotic therapy have prevented maternal complications.

INTRODUCTION:

Septic arthritis of the symphysis pubis is a rare infectious localization, often occurring in patients with a particular terrain (urological and pelvic surgery, sports). Pubic symphysitis associated with pregnancy is exceptional. The symptoms can mimic a myriad of pathologies masking the true diagnosis. X-ray signs may be delayed or undetected in some radiological investigations. As a result, the diagnosis may be missed and treatment delayed. We describe a case of septic arthritis of the pubic symphysis discovered postpartum associated with thrombosis of the right ovarian vein, presented to our service and which highlights the diagnostic difficulties and recalls the importance of maintaining a high level of suspicion based on clinical symptoms and key points for diagnosis in order to ensure prompt treatment and avoid serious complications.

CASE PRESENTATION:

We present a case of a 37-year-old woman who delivered in the obstetric gynecology department of FARHAT HACHED SOUSSE and who presented bilateral pubic and inguinal pain, on the second day of postpartum, with functional impotence of both lower limbs. The patient is a fourth gesture, having a history of hyperthyroidism and followed in psychiatry for a depressive syndrome. She has two children born vaginally of birth weight of 3500g and 4000g respectively. The youngest 5 years old.

The last pregnancy was regularly followed without any particular abnormalities. She gave birth to 40 weeks of vaginal amenorrhea of a newborn with a birth weight of 3950 g. Delivery was complicated by placental retention requiring uterine revision to evacuate the placenta and check uterine emptiness. The follow-up was simple and antibiotic prophylaxis with 2 g of direct intravenous amoxicillin was performed. The day after delivery, the physical examination was strictly normal.

On the second day postpartum, the patient described abdominal pain predominating in the right iliac fossa associated with acute bilateral inguinal pain, radiating to the buttocks and inner thighs, worsening on standing and causing lameness when walking, in a context of fever encrypted at 39 ° C.

Clinical examination found a febrile patient at 38.8 ° C, with a conserved general state, a clean throat, a stable hemodynamic state, normal cardiac and pulmonary auscultation, normal breasts. The abdominopelvic examination found a sensitivity at the level of the right iliac fossa without palpable mass, associated with a sensitivity to palpation of the pubic symphysis and the mobilization of the hip especially to the active adduction. The lochies were clean. the calves were soft.

Finally, an examination of the genital valve system was performed to eliminate normal perivaginal hematoma.

The diagnosis of acute appendicitis and deep vein thrombosis of the postpartum was mentioned. However, the diagnosis of a pubic disjunction was evoked in front the elements of the physical examination, although the absence of feto-pelvic dystocia during delivery made this diagnosis unlikely.

Biological exploration showed a biological inflammatory syndrome with moderate leukocytosis at 15,000 elements / mm3 and a C-reactive protein (CRP) at 63 mg / L. Bacteriological examinations such as uroculture were sterile.

The patient had a standard radiograph of the pelvis that showed an enlargement of the articular line of the symphysis pubis of 10 mm and an irregularity of the banks consistent with the diagnosis of pubic disjunction. A complement by an abdominopelvic CT with contrast injection was requested and it reversed the diagnosis of acute appendicitis and confirmed the diagnosis of ovarian vein thrombosis (VO) right (Fig.1) , showing a hypodense thickened tubular structure starting from the right lateral-uterine region and showed a highly suggestive symphysite appearance without abcused collection (Fig. 2).

Figure 1. Abdominal CT scan after contrast injection: Thrombophlebitis of right ovarian vein

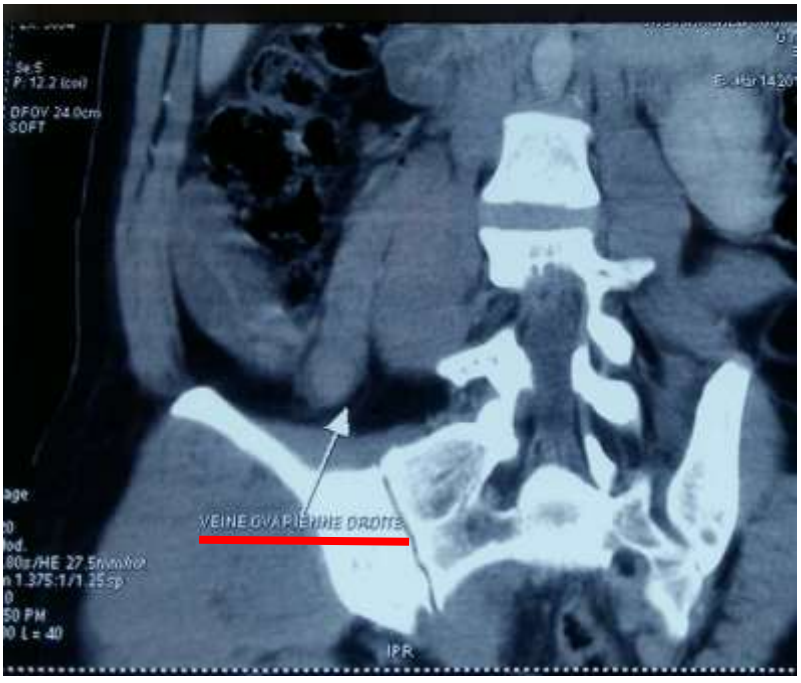

Figure 2. Pelvic scanner showing a diastasis of the pubic symphysis associated with an irregular appearance of the articular surfaces and fracture of the cortex

Figure 3. Radiograph of the pelvis showing a diastasis of the pubic symphysis

An etiological infectious assessment was carried out and the patient was put under a parenteral broad-spectrum probabilistic antibiotherapy combining a third-generation cephalosporin and a fosfomycin associated with non-steroidal anti-inflammatory drugs. A curative dose heparin (enoxaparin 1 mg / kg × 2 / day) was started. The vaginal sample was positive for Penicillin-sensitive Streptococcus B. Blood cultures and ECBU were negative.

The evolution was favorable with a progressive clinical improvement, reduction of pain and lameness after one week and regression of biological signs after one week of treatment. Dual therapy was maintained for 8 weeks. The patient left the service on the tenth day of hospitalization with antivitamin K. The patient was asymptomatic at the last control with a follow-up of 6 months.

DISCUSSION

Septic arthritis of the pubic symphysis is a rare condition accounting for 0.8 to 1.36% of all infectious arthritis in adults [1]. It is exceptional in a pregnancy context and in the postpartum [2] contrary to the thrombosis of the ovarian vein which

very often occurs in the postpartum [3-4] where its incidence varies in the literature from 1/2000 to 1 / 600 deliveries [5-4-6] with a higher rate after a caesarean section (1/800) compared to the lower lane (1/9000) [7].

The diagnosis of a pubic symphysitis is classically evoked in front of a feverish pubalgia complicated by a functional impotence. The difficulty of postpartum diagnosis lies, in addition to the rarity of the pathology, in the fact that this period is often accompanied by pain and a varied articular symptomatology, often difficult to analyze. Indeed, the discomfort of the delivery tables, the prolonged maintenance in the gynecological position, the physiological enlargement of the pubic symphysis during childbirth and the episiotomy are often at the origin of osteoarticular pain symptomatology and perineal postpartum.

In addition, fever, the second symptom useful for diagnosis, is often absent in the context of pubic symphysitis [8] but almost constant in the diagnosis of ovarian vein thrombosis where the clinical picture of the latter often comes down to a painful and febrile postpartum syndrome located in the iliac fossa or lumbar fossa [3-5-7-9]. Other more or less associated signs (nausea, vomiting, abdominal mass) may complete the clinical picture [5]. This symptomatology is nonspecific and can be seen in other circumstances such as appendicitis, pyelonephritis, high genital infection, cholecystitis, or hematoma of the broad ligament [3-7]. Appendicitis was the diagnosis strongly evoked in our patient.

The thrombosis of the ovarian vein must then be evoked as first-line and confirmed by imaging before any painful and / or febrile postpartum syndrome. The aim is to avoid unnecessary surgery and the occurrence of a serious complication such as pulmonary embolism [6-10].

On the biological level, there is classically in both cases an inflammatory syndrome with hyperleucocytosis most often moderate. This element is also difficult to analyze, because in a gravid context, moderate leukocytosis can be physiological.

However, despite the diagnostic difficulties for both symphysitis and thrombosis of the ovarian vein, after a critical analysis of our case and some clinical facts reported in the literature, we can still isolate certain clinical elements that should evoke the diagnosis of pubic symphysitis.

Indeed, the secondary onset of pain that did not exist in early postpartum, its increasing intensity, or its unfavorable and unconventional course, the presence of a fever or a functional impotence associated especially after a Non-obstructed labor is a factor that can guide the diagnosis of pubic symphysitis and should therefore lead to a CT scan or an MRI of the pelvis. These examinations typically show bone erosions, bank abscess, enlargement or effusion of the pubic symphysis [11]. In our case, before a confusing clinical and biological picture, a CT scan of the pelvis led to the diagnosis of symphysitis and thrombosis of the ovarian vein.

However, if the clinical diagnosis is difficult, it is easily confirmed by imaging for both ovarian vein thrombosis and pubic symphysitis.

Transversal abdominal ultrasonography coupled with Doppler is the first radiological investigation required for the diagnosis of TVO. Its sensitivity is often lacking and varies from 50 to 100% with a specificity close to 100% [5-7-9]. The limits of ultrasound can often be explained by the frequency of interposition of digestive gases. Abdominopelvic CT with contrast injection will be used to confirm the diagnosis with sensitivity ranging from 92% to 100% and specificity of 100% [7-9]. The CT scan also indicates an extension to the inferior vena cava or to the pulmonary vessels confirming pulmonary embolism. MRI, however, is rarely performed, but allows to date the age of the thrombosis because of the ferromagnetic characteristics of the thrombus [7-9]. In our patient the CT confirms the diagnosis and shows a lack of extension to the inferior vena cava with the absence of floating thrombus and pulmonary embolism.

In the case of symphysitis, the search for the germ is based on puncture-aspiration, the surgical drainage of a collection, or the removal at the level of an entrance door. In the Ross series, blood cultures were positive in 32% of cases and only 19% of patients required pubic puncture for bacteriological identification [2]. Staphylococcus aureus (34%) and pseudomonas aeruginosa (24%) are the most commonly implicated organisms [2]. Pubic symphysitis with streptococcus B

is exceptional [2]. In the case of our patient, the blood cultures were negative. The streptococcus B found on the vaginal swab made it very likely its involvement in this arthritis.

Treatment is very often medical for both pathology [3-5-6-12]. It is based, typically for pubic symphysis, on an antibiotic treatment of at least 6 weeks sometimes associated with the drainage of a collection [2]. The evolution is generally favorable in case of early diagnosis and treatment, nevertheless 55% of the patients required a surgical intervention either for a debridement, or for the evacuation of an abscess [8]. In the absence of treatment, the evolution can be towards chronicity with the possibility of fistula, bone sequestration and the possibility of pelvic cellulitis [13].

Among other things, antibiotic therapy should be broad-spectrum in the case of TVO that covers anaerobic and gram-negative bacilli; the infectious component is to be considered as always present [3-5-6-12]. This antibiotherapy is combined with effective anticoagulation with curative dose heparin (enoxaparin 1 mg / kg × 2 / day) followed by a relay with vitamin K antagonist for a period of six months [3-5-6-12].

This therapeutic protocol followed in our observation has proven its effectiveness and the evolution is most often favorable (80% of cases) with disappearance of clinical signs after 48 hours of well-conducted treatment [14]. These same findings are found in our patient.

An adverse development with persistence of clinical symptomatology after five days of correctly conducted treatment, the existence of a floating cavernous thrombus, complicated cases of pulmonary embolism and contraindication to medical treatment are indications for surgical treatment. [3-12]. This treatment consists of a vena cava filter or thrombectomy of the inferior vena cava and ligation of the ovarian vein [10]. Medical treatment was considered sufficient in our observation.

CONCLUSION:

Septic arthritis of the pubic symphysis and postpartum ovarian vein thrombosis are difficult to diagnose. We report a case of postpartum septic arthritis associated with right ovarian vein thrombosis occurring in the early postpartum period.

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