

Septic Arthritis of the Pubic Symphysis in Post-Partum: A Case Report

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Abstract: Septic arthritis of the pubic symphysis is a rare and exceptional postpartum infection that accounts for less than 1% of all septic hematogenous osteoarthritis. We report a case of a patient presenting with postpartum pubic symphysis vaguely delivered. In the face of the scarcity of localization of an infection and atypical symptomatology makes diagnosis difficult. Early diagnosis and anti-biotherapy adapted to the germ are important for a favorable evolution of the pathology and the prevention of chronicity.

Keywords: Septic arthritis, Pubic symphysis, Streptococcus.

INTRODUCTION

Septic arthritis of the pubic symphysis is a rare infection and still exceptional postpartum. It represents less than 1% of all hematogenous septic arthritis [1]. Symphyseal involvement is rare and occurs mainly in patients with a particular terrain (pelvic, urological and sports) [2].

Infection of the joint may be due to hematogenous grafting or neighborhood contamination. We report the case of a patient with postpartum septic arthritis of the pubic symphysis.

A CASE REPORT

The parturient, 36 years old, G3P3, without notable pathological antecedents. She has 2 children delivered vaginally with birth weights of 3200g and 3650g, respectively. The 2 deliveries were in the hospital and without incidents.

Pregnancy was conducted up to 38 weeks + 3 days. The parturient spontaneously delivered vaginally, with a right lateral episiotomy, a newborn baby male, a birth weight of 3800g, apgar 10/10 at 1 and 5 min. she was released on the 2nd day of the postpartum.

On day 16 of the postpartum, the patient presented to the gynecological emergency departments

for bilateral pubic and inguinal pain, irradiation to the buttocks and functional impotence of the lower limbs, which were disabling with micturition, all of which developed in a context of apyrexia.

The clinical examination showed a temperature at 37 ° C, exquisite pain on palpation of the pubic symphysis and bilateral inguinal, a sensitivity to the mobilization of the hip, absence of clinical signs of thrombophlebitis of the lower limb, the rest of the physical examination was without particularity. The standard radiology of the pelvis of face has objectified an enlargement of the articulation line of the pubic symphysis of 12mm (Figure 1).



Fig-1: Radiology of the pelvis showing an enlargement of the interphyseal space

The biological assessment showed a leukocytosis of 15000 elements / mm³ with an inflammatory syndrome with a CRP = 50mg / l. ECBU was positive for Streptococcus B. Blood cultures and vaginal sampling were negative.

In front of the absence of incidents and obstetric maneuvers during the delivery and before the presence of the inflammatory syndrome; the disjunction of the pubic symphysis seemed unlikely. After a rheumatological opinion, the diagnosis of septic arthritis of the pubic symphysis with urinary starting point was retained.

The patient was put on parenteral wide-spectrum probabilistic antibiotic therapy combining a third-generation cephalosporin, combined with nonsteroidal anti-inflammatory drugs. Oral antibiotic therapy has been prescribed for 6 weeks. The evolution was marked by a gradual disappearance of pelvic pain and functional impotence.

DISCUSSION

Arthritis of the septic pubic symphysis (ASSP) is a non-specific septic graft of the pubic joint. In the face of the scarcity of the localization of infection, especially postpartum infection, diagnosis is difficult [3].

In fact, the physiological enlargement of the pubic symphysis articulation during childbirth, the prolonged gynecological position and the episiotomy are also responsible for postpartum pelvic, inguinal and perineal girdle pain. The diagnosis of septic arthritis of the symphysis pubis should be evoked in the presence of atypical pelvic girdle pain complicated by functional impotence associated with a fever or inflammatory bowel syndrome [4].

Pubic palpation and hip mobilization is a simple gesture that can guide the diagnosis by avoiding unnecessary and expensive investigations [5]. The biological inflammatory syndrome classically exists with hyperleucocytosis most often moderated. The difficulty of analyzing this parameter resides in the presence of a moderate physiological leukocytosis in the gravidic context.

The level of C-reactive protein (CRP) appears to be correlated with the occurrence of septic arthritis. Indeed, the sensitivity increases with the CRP level, reaching 45-86% to more than 100 mg / l [6].

Standard radiology data show irregular margins, enlarged symphysis and / or images of bone destruction. It should be noted that 68% of baseline pelvic views are considered abnormal [7]. MRI and technetium 99 bone scintigraphy allow a more complete lesion assessment.

The causative organism is often isolated by blood cultures, puncture biopsy, surgical drainage of an abscess, or removal at the entrance. Blood cultures are positive only in 50% of septic arthritis [8] and symphysis puncture in 86% [9]. ECBU, vaginal sampling, the collection of pus at the level of the episiotomy are systematically to be realized.

The most commonly incriminated bacteria are: *S. aureus* (34%), *P. aeruginosa* (24%), polymicrobial flora (19%), *Escherichia coli* (5%), *Enterococcus sp* (5%), and *Mycobacterium tuberculosis* (3%). %) [9]. Streptococci are rarely isolated in this type of infection.

In the case of our patient, the blood cultures were negative. Streptococcus B found on the urine sample made it very likely that he would be involved in this symphysis.

According to Ross and Hu the risk factors for infectious symphysis; The surgical treatment of incontinence was involved in 27 cases (24 women and 3 men), sports practice in 19 cases, pelvic cancer in 17 cases, addiction in 15 cases, and recent delivery in 2 cases [9].

It is important to differentiate between septic symphysis and inflammatory non-infectious arthritis of the pubic symphysis where the infectious balance is negative, occurring after trauma, gynecological or urological surgery, in the athlete and obviously after childbirth [9, 4, 10, 11].

The treatment is based on the discharge of the lower limbs and antibiotic adapted to the vein by the oral route relayed orally for a period of between 6 to 8 weeks. The optimal duration of treatment remains controversial in the absence of a randomized study 4. The mean duration of treatment in the 100-case series reported by Ross *et al.* was 54 days [14].

The evolution of our patient was quickly under anti biotherapy alone. Nevertheless, in the literature, 55% of patients required surgery for either debridement or evacuation of an abscess [12]. The early diagnosis and treatment allows the prevention of chronic pain, stiffness and joint instability [13]

CONCLUSION

Septic symphyseal arthritis is a rare and sometimes misleading infection, especially in the postpartum period, whose diagnosis must be suspected in the presence of atypical pain accompanied by fever and / or functional impotence. MRI and puncture biopsy confirm the diagnosis.

The precocity of the therapeutic management by adapted antibiotics allows a favorable evolution and the prevention of the chronicity of the pathology [5].

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