

Abscess of the Iliopsoas Muscle Discovered in Premature Newborn: about a Case in Dakar

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ABSTRACT

The abscess of the Iliopsoas muscle is an unusual situation in the new born. Its diagnosis is difficult due to its non-specific symptomatology. We report the case of a 19-day-old, premature and male infant. He presented with an abscess of the left iliopsoas muscle diagnosed by the ultrasound and CT scan pair. The treatment started was an evacuated needle puncture guided by ultrasound and antibiotic therapy targeting staphylococcus aureus. The evolution was favorable.

Keywords: Abscess; Iliopsoas; Newborn

INTRODUCTION

Abscess of the Iliopsoas muscle is a rare infection, especially in newborns. The diagnosis is often made late because of the age and the non-specificity of the clinical symptomatology reminiscent of involvement of the hip or the inguinal region [1,2]. We report a case of psoas abscess in a premature newborn, showing the diagnostic difficulties of psoas abscess in newborns and reviewing the medical literature.

OBSERVATION

Newborn male, born from a low transverse Cesarean section indicated in front of an eclampsia at 31 SA. He had presented on the 6th day of life a pustule on the left inguinal level which, leaving seropurulent liquid; the baby was put on oral treatment with favorable evolution. He was readmitted on the 19th day of life for fever associated with functional impotence of the lower limbs without any notion of trauma. In front of this table, it was referred to our service for better care.

On examination, he was aware that he was in good general condition, was feverish with a temperature of 38°C, the pulse was 110 beats / minutes, the respiratory rate was 39 cycles / minute and the weight was 1800 grams. He had a slightly bloated but flexible abdomen with no palpable mass.

The somatic examination objectified a pseudo-paralytic attitude of the left lower limb and an inflammatory swelling of the left

groin. Any attempt to mobilize the lower left limb triggered tears. Elsewhere the examination was without anomalies. Biology had shown a hyperleukocytosis with 23,960 elements / mm³, a hemoglobin level at 12g / dl and a C-Reactive Protein at 19 times normal (114mg / l). Uremia and serum creatinine and the balance sheet hepatic were normal. The abdominal x-ray without preparation was without abnormalities.

The abdominopelvic ultrasound showed an extensive fluid collection from the left flank to the left iliac fossa, making an abscess of the psoas muscle suspected. The abdominal computed tomography had shown an infiltrated aspect and a fusiform collection within the left ilio-psoas muscle with contours silhouetted by the product of contrast without obvious intra-abdominal and intra-articular effusion of the hips. A normal CT scan appearance of the spine was noted.

Parenteral probabilistic dual antibiotic therapy, based on cefotaxime 280 mg/day and gentamycin 5 mg/day, was started. Percutaneous ultrasound guided drainage was attempted without success. Finally, we performed an echo-guided evacuation puncture which brought back about 10cc of frank pus. The cytobacteriological study of pus had isolated a meti-sensitive staphylococcus aureus.

Therapy had been observed 48 hours later with CRP and a white blood cell count which had dropped by half 48 hours after. The control CT scan had objectified a small residual

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collection of 1cc. The evolution was favorable with discharge of the patient on 7th day after evacuation of the pus. He was put on anti oral staphylococcus for 2 weeks with normalization of biology (Figure 1)

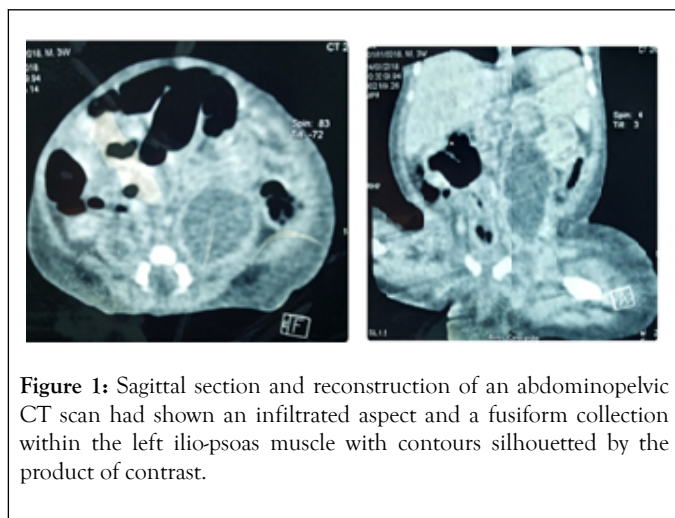


Figure 1: Sagittal section and reconstruction of an abdominopelvic CT scan had shown an infiltrated aspect and a fusiform collection within the left ilio-psoas muscle with contours silhouetted by the product of contrast.

DISCUSSION

Iliopsoas abscess is a rare retroperitoneal infection, first described by Mynter in 1881 [3]. It is a particularly unusual situation in newborns. The ilio-psoas abscess can be primary or secondary to an underlying pathology with digestive, renal or osteoarticular localization. The primary form is the most frequent in the newborn and is related to a hematogenous or lymphatic diffusion of a germ from a distant infectious focus.

In our patient, this would likely be a bacteremia distant from the outbreak, probably starting from the skin (given his inguinal pustule history). The notion of prematurity noted in our patient would also be a predisposing factor. Prematurity was also reported by Edgar [4] and Natsume [5]. Other entry points such as intramuscular hemorrhage, umbilical venous catheter infection, and urethral infection have been found [1, 4, 5]. However, the precursor is unknown in most cases of neonatal abscess [2]. In the literature, the most isolated germ for primary iliopsoas muscle abscess is staphylococcus aureus [1, 2, 5].

The onset time is between 15 and 21 days [5]. The start in our case was 19 days; it is included in this period. In older children and adolescents, the diagnosis seems to be easier in front of a classic triad, associating psoitis, painful lameness and mass of the flank or the iliac fossa, evolving in a febrile context [6]. However, the diagnosis of Iliopsoas muscle abscess in newborns and infants is often made late, due to the age and lack of specific clinical symptoms [1, 2].

The abscess of the ilio-psoas muscle is responsible for a pseudo-paralytic attitude of the lower limb and an inflammatory inguinal swelling in the newborn which may wrongly suggest involvement of the hip or the groin. So an Iliopsoas abscess should be included in the differential diagnosis of poor leg movement and swelling of the groin towards the femur in a baby two to three weeks old [5].

Ultrasound and CT scan allow the diagnosis of abscess of the Iliopsoas muscle in the neonatal period. In addition to their

diagnostic role, they can be used as a locating tool during percutaneous drainage. The CT scan is more efficient because it makes it possible to study the lesion with precision and to describe its relationships with the neighboring organs. In addition, during this period it is often performed without sedation [1]. Other authors have used magnetic resonance imaging to make the diagnosis. It is a less invasive diagnostic method but infants sometimes need a strong sedation during the execution [7,8].

The treatment is medico-surgical. At the beginning stage and in the presence of a small collection, antibiotic therapy adapted according to the results of the different samples is sufficient to observe the apyrexia and the evolution is generally favorable [9,10]. At the collection stage, antibiotic therapy combined with ultrasound guided drainage will be attempted first [11].

In the event of percutaneous drainage failure, surgical drainage is essential allowing good evacuation of pus and the establishment of an effective drainage system while making it possible to avoid recurrences [2, 10]. The course is generally favorable under appropriate antibiotic therapy the prognosis is good.

CONCLUSION

The abscess of the psoas muscle is exceptional in the newborn. It is often manifested by a pseudo paralytic attitude of the limb and swelling in the groin, which wrongly suggests hip involvement. The abscess of the psoas should be included in the differential diagnosis, when a newborn baby has limitation of movement and swelling of the lower limb evolving in a febrile context.

CONFLICT OF INTEREST

No

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