Septic Pseudopodagra Caused by Streptococcus agalactiae

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Pseudopodagra is an unusual cause of first metatarsophalangeal arthritis. There are multiple causes, and an infectious cause always has to be excluded. We report a septic pseudopodagra by Streptococcus agalactiae in a patient with chronic hepatopathy with an indolent evolution and a consequent delay in diagnosis. Antibiotic treatment was installed with a favorable outcome without functional sequelae. The pseudopodagra reports in the bibliography are reviewed with special attention on those of infectious etiology.

Key words: Pseudopodagra. Infectious arthritis. Streptococcus agalactiae.

Clinical Cases

Seudopodagra séptica por Streptococcus agalactiae

La seudopodagra es una causa infrecuente de artritis de primera metatarsofalángica (MTF). Entre sus múltiples causas, siempre hay que descartar el posible origen infeccioso. Se presenta un caso de seudopodagra séptica por Streptococcus agalactiae en un paciente con hepatopatía crónica en el que se retrasó el diagnóstico por su curso indolente. Recibió tratamiento antibiótico intravenoso con buena evolución y sin secuelas funcionales. Se realiza una revisión de los casos de seudopodagra descritos en la bibliografía, con especial atención en los de causa infecciosa.

Palabras clave: Seudopodagra. Artritis infecciosa. Streptococcus agalactiae.

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Manuscript received August 28, 2005; accepted for publication May 4, 2006.

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mg/L; urates, 4.1 mg/dL; albumin, 22.6 g/L; bilirubin, 2.43 mg/dL; GOT, 37 U/L; GPT, 28 U/L; prothrombin time, 33%; and 146 000/µL platelets. Arthrocentesis of the first MTP was done, obtaining a drop of joint fluid that enables us to do a culture and start empiric antibiotic treatment with ceftriaxone 2 g/24 h and cloxacylin 2 g/4 h intravenously while we awaited the results of the microbiologic study. In the joint fluid S. agalactiae sensitive to penicillin was isolated. After doing a transthoracic echocardiogram, endocarditis was ruled out. Antibiotic treatment was completed with the intravenous ceftriaxone during 2 weeks and posteriorly during 3 weeks after discharge. Evolution since that has been satisfactory with no functional consequences.

Discussion

The differential diagnosis of an acute monoarthritis is ample and its approach is based on arthrocentesis and the analysis of joint fluid, including biochemistry with glucose, proteins and a cell count, urgent Gram stain and culture and cytologic analysis with polarized light searching for crystals. Occasionally, the clinical scenario in which a monoarthritis presents itself is characteristic of a disease, making it possible to omit the arthrocentesis. This occurs especially if the affected joint is small, such as the first MTP, a situation that is highly suggestive of gout.1 In spite of this, there have been other described causes of first MTP joint arthritis that received the name of pseudopodagra that we must remember. The literature has well described cases of pseudopodagra due to hydroxypatite.2 This entity is due to the deposit of hydroxypatite crystals in the soft tissue adjacent to the first MTP joint (periartitis) or in the joint space, causing full-fledged arthritis. The deposit of calcium pyrophosphate crystals be it around the joint or inside the joint, has also been described as a cause of pseudopodagra.3 The presence of radio graphically evident periaricular calcifications in a patient with podagra must make a suspect any of these 2 entities.4 Spondyloarthopathies can present as an asymmetric oligoarthritis, and the MTP joint synovitis is a common manifestation. In a series of 143 patients with spondyloarthopathies, 17 cases of pseudopodagra were found.5 Rheumatoid arthritis also frequently affects the MTP joints, although this is in the context of a symmetric polyarthritis, making it a rare differential diagnosis. Belchet’s disease,6,7 osteonecrosis, sesamoiditis, and hallux rigidus8 can also be included in the differential diagnosis of pseudopodagra. Finally, one must not forget that when faced with an acute monoarthritis, one is obliged to rule out an infectious cause through arthrocentesis and appropriate cultures, especially when a cause cannot be identified based on previous diagnoses. In our case, in spite of having a patient with a moderate consumption of alcohol, there were no previous indications of hyperuricemia or gout. The absence of septic data and the overall good state of our patient may does skip the arthrocentesis on the first encounter. Among the bone and joint infections that can present as a pseudopodagra, the most frequent one is tuberculosis,9,10 while the pyogenic are less frequent and are described in the literature as isolated cases, among them Haemophilus influenzae,11 Pasteurella multocida,12 Bacillus,13 and Brucella.14 There is also one described case of fungal infection.15 It must be emphasized that it is important to adequately approach the patient with acute monoarthritis in an emergency department based on the presence of an underlying illness, such as diabetes, chronic liver disease, or chronic kidney disease. Apart from being more susceptible to infections, these diseases can present with the more difficult evolution and hide serious disease, such as the present case.

References


Reumatol Clin. 2006;2(6):324-6