ARTICLE IN PRESS

The Egyptian Rheumatologist xxx (xxxx) xxx-xxx

TAN TO THE PARTY OF THE PARTY O

Contents lists available at ScienceDirect

The Egyptian Rheumatologist

journal homepage: www.elsevier.com/locate/erhe



Case reports

Tophaceous hip gouty arthritis revealing asymptomatic axial gout

Rawdha Tekaya^{a,d}, Aicha Ben Tekaya^{a,d,*}, Olfa Saidane^{a,d}, Hanen Ben Said^{a,d}, Ali Gaja^{b,d}, Hana Sahli^{c,d}, Ines Mahmoud^{a,d}, Leila Abdelmoula^{a,d}

- ^a Department of Rheumatology, Charles Nicolle Hospital, Tunis, Tunisia
- ^b Department of Radiology, Charles Nicolle Hospital, Tunis, Tunisia
- ^c Department of Medicine, Tahar Maamouri Hospital, Nabeul, Tunisia
- d Faculty of Medicine of Tunis, University of Tunis El Manar, Tunisia

ARTICLE INFO

Keywords: Gout Tophi Hip

Hip Sacroiliitis Lumbar spine

ABSTRACT

Background: Hip and axial involvement is uncommon during gout and may raise diagnostic challenges. We describe a rare case of tophaceous hip gout which lead to the diagnosis of asymptomatic axial tophaceous gout at a single rheumatology center.

Case presentation: A 35-year-old man, diagnosed with tophaceous polyarticular gout 14 years before presentation, consulted for a gout attack with reduced hip range-of-motion on physical examination and an increased serum uric acid level (655 µmol/L). He had been regularly taking colchicine, allopurinol (300 mg/j), and occasionally non-steroidal antiinflammatory drugs. Plain Radiography of the hips revealed bilateral circumferential joint space narrowing, subchondral erosions of the right acetabular, a calcified soft tissue tophus of the left hip and bilateral sacroiliitis grade IV. Computed tomography (CT) showed total ankylosis of the upper segments of both sacroiliac joints and bilateral hip joint space narrowing, subchondral geode eroding the right acetabulum. Moreover, CT revealed soft-tissue tophi involving the major trochanter of the left acetabulum, the right coxofemoral joint and lowest two levels of lumbar facet joints (L4-L5; L5-S1). A spinal and plevis magnetic resonance imaging (MRI) concluded on a gouty tophi, locolized bilaterally intraarticularly in the coxofemoral joints, gluteus medius bursae, lumbar facet joints (L4-L5; L5-S1), and cofirmed bilateral sacroiliitis.

Conclusion: The axial and hip gouty arthritis are exceptionnel localisation. Radiographic imaging tools, mainly CT and MRI, may show the monosodium urate crystals and tophi that can contribute to bone and joint lesions of gout. They also allow the exclusion of other possible etiologies such as spondylodiscitis, infection, and neoplasia.

1. Introduction

Gout is a common form of inflammatory arthritis, typically presenting as intermittent attacks of arthritis, and invariably accompanied by serum uric acid elevation; tophaceous deposits are pathognomonic. Localized urate deposits may also be found in extraarticular sites, or tophi, which in general are present in the later stages of the disease that is commonly found in hands, feet, bursa of the olecranon, and helix of the ear. Tophaceous gout could exceptionally affects the spinal column and the hip. The first case of tophaceous gout in the spine was published in 1950 [1]. Gout has been reported to affect the hip as early as 1963 [2]. Since then, some anecdotal cases have been reported in the literature. However, because most of the existing data regarding this subject come from case reports or small series, little is known about the true prevalence of axial and hip gout and possible associated clinical or laboratory features that could predict the existence of these lesions.

In this observation, we report an unusual case of tophaceous hip gouty arthritis which lead to the diagnosis of axial asymptomatic tophaceous gout in a young man.

2. Case presentation

A 35-year-old man, born to a first-degree consanguineous marriage with history of delayed walking (onset at 5 years), was diagnosed with tophaceous polyarticular gout 14 years before presentation. He had a rigorous compliance of his non-pharmacological treatment (diet, life-style intervention). He had been regularly taking colchicine, allopurinol (300 mg/day), and an occasional non-steroidal antiinflammatory drug (NSAID) for gout flares which offered a temporary pain relief. He presented for a gout attack involving both knees, elbows and the meta-carpophalangeal (MCP) joints. The case report conforms to the 1995 Helsinki ethical declaration. Informed consent was obtained from the

Peer review under responsibility of Egyptian Society of Rheumatic Diseases.

https://doi.org/10.1016/j.ejr.2017.10.001

Received 8 October 2017; Accepted 21 October 2017

1110-1164/ © 2017 Publishing services provided by Elsevier B.V. on behalf of Egyptian Society of Rheumatic Diseases. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/BY-NC-ND/4.0/).

^{*} Corresponding author at: Department of Rheumatology, Charles Nicolle Hospital, Tunis, Tunisia. *E-mail address*: aichabentekaya@gmail.com (A.B. Tekaya).



Fig. 1. Plain Radiography of the hips: bilateral sacroiliitis grade IV and calcified soft tissue tophus of the left hip (yellow arrows). (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

patients.

Physical examination revealed no active synovitis in the peripheral joints, but slightly reduced hip range-of-motion for flexion at 100 degrees and internal rotation at 5 degrees, bilaterally. There were scattered tophi on the right ear lobe, elbows, wrists, knees, achilles tendons and feet without any sign of inflammation. However, there was a tophus on the second MCP joint which erupt through the skin and discharged a chalky substance with secondary wound infection colonized by Staphylococcus aureus. The laboratory investigation showed an increased serum uric acid level (655 μ mol/L), and normal values in creatinine (54 μ mol/L). Kidney ultrasound was consistent with non-obstructing calyceal stones with normal-sized kidneys.

Plain Radiography of the hips revealed bilateral circumferential joint space narrowing, subchondral erosions of the right acetabular, a calcified soft tissue tophus of the left hip and bilateral sacroiliitis grade IV (Fig. 1). Computed tomography (CT) of the pelvis confirmed total ankylosis of the upper segments of both sacroiliac joints and showed bilateral hip joint space narrowing, subchondral geode eroding the right acetabulum. Moreover, CT revealed lobulated soft tissue mass involving the major trochanter of the left acetabulum, the right coxofemoral joint and the two lowest levels of lumber facet joints (L4-L5; L5-S1), with amorphous calcification, consistent with soft-tissue tophi. Once suspicion was raised about axial gout, we performed a spinal and plevis magnetic resonance imaging (MRI) (Fig. 2).

The MRI showed low signal on T1 and T2-weighted images soft tissue mass with significant gadolinium enhancement, suggesting gouty tophi, localized bilaterally intra-articularly in the coxofemoral joints, gluteus medius bursae, lumbar facet joints (L4-L5; L5-S1), and surrounding the left gluteus medius tendon. MRI revealed the presence of joint effusion in the coxofemoral joints and gluteus medius bursitis. Moreover, MRI confirmed bilateral sacroiliitis. He was treated by allopurinol (600 mg/day) with good evolution of his condition.

3. Discussion

Our case represents hip tophaceous gouty in a young man (35 years

old). This symptomatic chronic arthritis revealed an asymptomatic axial tophaceous gout involving the lumbar spine and sacroiliitis. Gout usually involves inferior limbs and particulary the first metatarsophalangeal joint, ankles and knees. Hip localization of gout is uncommon [3]. To our knowledge, only a few reports of gouty arthritis affecting the hip, with documented presence of urate crystal, have been described [2,4–10].

As previously reported in the literature, usually, it is in cases of chronic tophaceous gout that the location to the hip joint seems more described in subjects of mature age and pathological personal medical history [4–6,11]. Sometimes, in these cases, hip involvement was associated with complications such as joint destruction [4], fracture [5], and osteoarthrosis or developed after hip arthroplasty [6]. While several reports showed that hip involvement occured in case of chronic gout, others authors reported cases of acute hip gout arthritis [2,8–10]. Two recent papers pointed out the role of ultrasound guided hip joint aspiration and synovial fluid analysis revealing monosodium urate (MSU) crystals and confirmed the diagnosis of gout [9,10]. From the therapeutic viewpoint, colchicine and diet allowed good evolution in the first case [9] and anakinra (100 mg/day for 5 days) was necessary for improvement and decreasing C-reactive protein level in the other patient [10].

The location of gout at the hip is considered rare, even exceptional in young subjects [2,9] as in our patient, however it was a chronic tophaceous gout (the disease duration was 14 years). Similarly, Dos Santos et al. reported a case of gouty arthritis with involvment of lumbar spine, sacroiliac and hip joints [11]. However, the case study was described in a 52-year-old man without concomitant clinical evidence of tophaceous gout on admission. CT showed erosive lesions and MRI of the pelvis revealed edema in the mid-substance of the soft tissues adjacent to the right gluteal tendons, associated with focal edema in the large femoral tuberosity and net distension of the trochanteric bursa and the related synovial bursae.

Axial gout had also previously been thought to be rare, nevertheless recent studies have shown prevalence rates up to 35% in patients with gouty arthritis [12,13]. Spinal gout commonly involves the lumbar

Download English Version:

https://daneshyari.com/en/article/8737452

Download Persian Version:

https://daneshyari.com/article/8737452

<u>Daneshyari.com</u>