Tzu Chi Medical Journal 26 (2014) 185-188

Contents lists available at ScienceDirect

Tzu Chi Medical Journal

journal homepage: www.tzuchimedjnl.com

# Spinal gouty tophus presenting as an epidural mass with acute myelopathy

Che-Kuang Lin, Yi-Hsin Tsai, Shih-Hao Huang, Lin-Hsue Yang, Wen-Jui Chang\*

Division of Neurosurgery, Department of Surgery, Far Eastern Memorial Hospital, Banqiao, New Taipei, Taiwan

#### A R T I C L E I N F O

Article history: Received 19 July 2013 Received in revised form 26 July 2013 Accepted 26 July 2013

Keywords: Epidural Extradural Spinal gout Tophus

#### ABSTRACT

An uncommon case of spinal gouty tophus was diagnosed in a 74-year-old man who presented in the emergency department with sudden onset of acute paraplegia. The patient underwent laminectomy and nodule removal for neurodecompression. After surgery, the patient demonstrated good functional recovery and returned to baseline performance status. Intraspinal tophi are rare. Image study may show irrelevant findings. In patients with gout, the differential diagnosis should include tophi. In the present case, imaging did not reveal much inflammatory change, but severe symptoms were observed, and a definite preoperative diagnosis was difficult. In cases with neurological compromise, timely neurosurgical decompression leads to good outcomes, as in the present case.

Copyright © 2013, Buddhist Compassion Relief Tzu Chi Foundation. Published by Elsevier Taiwan LLC. All rights reserved.

#### 1. Introduction

Gout typically affects the peripheral joints and rarely involves the intraspinal area [1]. It is a common metabolic disorder with well-defined clinical, biochemical, and radiological features [2]. Development of gout involves deposition of monosodium urate monohydrate crystals in the tissues, leading to acute episodes of inflammation and long-term sequelae [2]. Globally, gout affects 1– 2% of the population, and the prevalence may increase over time [3]. In Taiwan, the overall prevalence of gout is approximately 3%, with a slight male predominance [4].

Typical images of intraspinal gout include para-articular bony erosions with sclerotic margins. The gouty lesion may show low to intermediate signal intensity on T1-weighted magnetic resonance imaging (MRI) and intermediate to high signal intensity on T2-weighted MRI. The tophus itself is a strong inflammatory agent that causes prominent inflammation affecting the surrounding tissue. Periarticular soft tissue thickening is usual [5].

Patients with spinal gout may present with acute neurological deficits caused by cord or root compression, although this condition is rare. Here, we described a patient with poorly controlled gout

that affected multiple peripheral joints; the patient presented with acute myelopathy.

### 2. Case report

A 74-year-old man presented with a 20-year history of severe gouty arthritis, including tophus formation in the peripheral joints; multiple joint deformities were also noted. In addition, he had suspected gouty nephropathy, resulting in chronic renal insufficiency, for more than 10 years. Two days before admission, the patient experienced an acute gout flare-up, with swelling of the left forearm and fever associated with hyperuricemia (serum uric acid 8.3 mg/dL). During this time, he showed a good response to antibiotic treatment for suspected concomitant cellulitis. However, on the night before admission, the patient developed acute onset of paraplegia with acute urine retention. There was no history of recent trauma, but he reported intermittent lower back pain over the preceding few years. He was unable to walk unassisted for long distances because of severe, bilateral joint deformities in the knees and feet.

Both legs showed negative results in a straight leg-raising test; however, sensory disturbance below the L1 dermatome level was noted. Bilateral deep-tendon reflexes of the Achilles tendon and knee jerk were increased, but the bulbocavernosus and cremasteric reflexes were decreased. His anal tone was sparing but weak. The patient had a distended bladder, and voiding was reported to be difficult; an indwelling urinary catheter was inserted.

Spinal MRI to check for a thoracic or lumbar lesion revealed a 1.2-cm epidural mass at the T12–L1 level, with cord compression



Case Report



THE WERE



Conflicts of interest: none.

<sup>\*</sup> Corresponding author. Division of Neurosurgery, Department of Surgery, Far Eastern Memorial Hospital, 21, Section 2, Nan-Ya South Road, Banqiao, New Taipei City, Taiwan. Tel.: +886 2 8966 7000; fax: +886 2 2935 6940.

E-mail address: tetsukohayashi@hotmail.com (W.-J. Chang).

<sup>1016-3190/\$ -</sup> see front matter Copyright © 2013, Buddhist Compassion Relief Tzu Chi Foundation. Published by Elsevier Taiwan LLC. All rights reserved. http://dx.doi.org/10.1016/j.tcmj.2013.09.004



Fig. 1. (A, B) T1-weighted images show an isointense epidural nodule (arrow) with cord compression. (C, D) T2-weighted images show a hypointense epidural nodule. (E, F) T1-weighted images with gadolinium enhancement show rim enhancement of the nodule (arrow) and enhancement of some paraspinal soft tissues (arrowheads).

Download English Version:

## https://daneshyari.com/en/article/3841855

Download Persian Version:

https://daneshyari.com/article/3841855

Daneshyari.com