

CASE IMAGE

Femoral head avascular necrosis of in a young cushingoid opium addicted patient in the context of new combined opioid substance with corticosteroids

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Key Clinical Message

AVN should be considered in addicted to oral opium patient without history of glucocorticoid consumption who present with pelvic pain, due to recent reports of the illegal and secret addition of glucocorticoid in new combination substance with opium.

KEYWORDS

avascular necrosis, exogenous Cushing, new substance combination, opium addiction

1 | CASE DESCRIPTION

A 35-year-old opium addict male without any previous past medical history, who had referred to a rheumatologist with pelvic pain, especially on the left side, and the inability to bear weight since 1 week ago. On the examination, in addition to the limitation of left hip joint range of motion, especially in external rotation and internal rotation, moon face and wide purple striae in the abdomen and limbs were obvious. The patient has normal mental status and an almost normal behavior and personality. His addiction started 2 years ago. He pointed out that in the last few months, he has suffered from facial puffiness and weight gain, and despite taking oral opioids, he has

had less hangovers. Blood pressure was 150/80 mmHg, and body temperature was 37/2°C. Random blood sugar: 286 mg/dL was the only abnormal laboratory test. In approach to the signs and symptoms of hypercortisolism, ACTH and cortisol 8:00 AM levels were requested, and due to suppressed ACTH (5 g/mL) and the lower normal limit of cortisol 8:00 am (4 mg/dL), exogenous Cushing's syndrome was suggested. The patient denied taking any corticosteroids. By denying the use of any type of oral or injectable glucocorticoids by the patient, as well as the evidence of hypercortisolism such as suppressed ACTH, osteoporosis in bone densitometry, moon face and purple abdominal striae, the diagnosis of unawarely use of exogenous corticosteroids in combination with oral opioids is

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FIGURE 1 (A) Plain pelvic x-ray with evidence of femoral head necrosis, (B, D, F) MRI axial sections of both femur heads (C, E) MRI coronal sections indicating left femur head AVN.

more likely. According to imaging findings in pelvic plain radiography and MRI, avascular necrosis (AVN) was detected and orthopedic surgery consultation was sent for hip joint effusion drainage and decompression procedure (Figure 1). Corticosteroids combined with opioids was the main culprit, which the patient was unaware of. Corticosteroids are added to opium in order to reduce the symptoms of opioid hangover. Unawareness of patient from the combination of these illegal drugs and the serious side effects of long-term exposure of corticosteroids in the body, such as AVN and osteoporosis, is highlighted the importance of following up this issue through competent authorities.^{1–3}

AUTHOR CONTRIBUTIONS

Alireza Khabbazi: Investigation; software; supervision; visualization. **Mehrzaad Hajjaliloo:** Conceptualization; data curation; methodology; supervision. **Mitra Niafar:** Conceptualization; investigation. **Sepideh Tahsini Tekantapeh:** Data curation; formal analysis; investigation; methodology; software; supervision; visualization; writing – original draft; writing – review and editing.

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CONFLICT OF INTEREST STATEMENT

There are no conflicts of interest.

DATA AVAILABILITY STATEMENT

The patient details are available in the electronic medical records and can be made available by the authors on request.

ETHICS STATEMENT

This article was written in compliance with the Helsinki Declaration.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

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