Metallosis

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Key words: arthroplasty, hip, metallosis, prosthesis

(Intern Med 51: 2071-2072, 2012)

(DOI: 10.2169/internalmedicine.51.8111)

Picture 1.

Picture 3.

Picture 2.

Picture 4.

A 49-year-old woman had had bilateral total hip arthroplasty 8 years previously. She suffered from left hip pain with fever. Plain radiograph showed a peripheral high-density lesion in the superior region of the left hip (Picture 1). CT scan showed a 6.4 cm non-enhanced lesion (Picture 2). The prosthesis screw projected out beyond the acetabulum to the iliopsoas bursa (Picture 1, 2; thin arrow).

Abscess was unlikely. MRI revealed a juxta-articular lesion with a heterogeneous hypointensity (Picture 3, 4). CT guide biopsy was performed and histology revealed many black pigmented areas engulfed by histiocytes in a densely fibrotic background. Metallosis was diagnosed.

Metallosis is defined as an infiltration of metallic debris

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Received for publication May 5, 2012; Accepted for publication May 7, 2012

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in the periprosthetic soft tissue and bone as a result of wearing arthroplasty (1). The failure rate due to metallosis ranges from 0.3 to 3.1% over 3-5 years after the arthroplasty (2). Diagnosis is made based on clinical manifestation and imaging evidence.

The authors state that they have no Conflict of Interest (COI).

References

1. Heffernan EJ, Alkubaidan FO, Nielsen TO, Munk PL. The imaging appearances of metallosis. *Skeletal Radiol* **37**: 59-62, 2008.
2. Subbu R, Sagoo RS, Goswami V, et al. Metallosis in metal-on-metal hip resurfacing: an unusual presentation. *Eur J Radiol Extra* **78**: e101-e104, 2011.

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