

Magnetic Resonance Imaging in the Diagnosis of Aseptic Osteonecrosis of the Femoral Head (Lecture)

A.V. Bryukhanov

Altai State Medical University, Ministry of Healthcare of Russia, Radiological and Endoscopies Department

Abstract

The article is devoted to the description and illustration of MR tomography symptoms of aseptic osteonecrosis of the femoral head at the various stages of the process according to the international classification of osteonecrosis of the femoral head ARCO. It shows characteristic MR tomography symptoms of early, reversible and irreversible initial stage, the stage of impression fracture and late stages of the process.

Key words: Magnetic Resonance Imaging, Aseptic Osteonecrosis of the Femoral Head.

References

1. Boraiah S., Dyke J. P., Hettrich C. *et al.* Assessment of vascularity of the femoral head using gadolinium (Gd-DTPA)-enhanced magnetic resonance imaging: a cadaver study. *J. Bone Joint Surg. Br.* 2009. V. 91 (1). P. 131–137.
 2. Helms C. A., Major N. M., Anderson M. W. *et al.* *Musculoskeletal MRI* Saunders. Inc. 2009. 442 p.
 3. Lee J. H., Dyke J. P., Ballon D. *et al.* Assessment of bone perfusion with contrast-enhanced magnetic resonance imaging. *Orthop. Clin. N. Am.* 2009. V. 40 (2). P. 249–257.
 4. Tiderius C., Jaramillo D., Connolly S. *et al.* Post-closed reduction perfusion magnetic resonance imaging as a predictor of avascular necrosis in developmental hip dysplasia: a preliminary report. *J. Pediatr. Orthop.* 2009. V. 29 (1). P. 14–20.
 5. Yeh L. R., Chen C. K., Huang Y. L. *et al.* Diagnostic performance of MR imaging in the assessment of subchondral fractures in avascular necrosis of the femoral head. *Skeletal Radiol.* 2009. V. 38 (6). P. 559–564.
-

Author

Bryukhanov Aleksandr Valer'evich, M. D. Med., Prof., Head of Department of Radiology and Endoscope of Altai State Medical University, Ministry of Healthcare of Russia.
Address: 656038, Russia, Barnaul, Komsomol'skiy st., 75a.
Phone number: +7 (3852) 26-17-46. E-mail: abryukhanov@dcak.ru