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LETTER TO THE EDITOR - INFECTION

Bone resorption around anular closure device

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Dear Editor,

We read with great interest the article by Lange et al. [2] published in Acta Neurochirurgica entitled "Symptomatic annulus-repair-device loosening due to a low-grade infection." The authors note that "Here we present, to our knowledge, the first case of symptomatic device loosening."

We also have an experience of performing of the annuloplasty using the closure device. In our department, this technology has been applied since 2012. Based on the results of our work, a number of publications have been published in Russian and international journals. In our experience, we also had the cases of re-operation. One of them was published in the "International Journal of Surgery Case Reports" (volume 24, 2016, pages 119–123) entitled "Reoperation after microdiscectomy of lumbar herniation: Case report" (authors Krutko, A.V., Baykov, E.S., Sadovoy, M.A.). We described a case of re-operations after microdiscectomy and annuloplasty using the Barricaid® (Intrinsic Therapeutics, Woburn, MA, USA) closure device. A month after the operation, the patient complained of back and right leg pain. Examination revealed bone resorption around the implant and signs of inflammatory changes in the adjacent tissues. Laboratory analysis revealed no increase in acute-phase response indicators. Taking into account the clinical data, the data obtained by instrumental methods, and resistance to conservative therapy, the patient underwent revision surgery.

No signs of purulent inflammation around the implant were revealed intraoperatively. The implant resided at a typical site but was easy to displace. The adjacent tissue was harvested for bacteriological examination. The revealed changes were regarded as aseptic loosening of the implant. A decision was made to remove the implant and perform transpedicular and interbody fixation of the functional spinal unit. The bacteriological study of peri-implant tissues revealed no microflora growth. The patient was mobilized on the day of surgery. The wounds healed by primary intention. On day 7, the patient was discharged for outpatient treatment. At discharge, the VAS scores of leg pain and back pain were 0 and 4, respectively. Patient's condition remained stable within the subsequent 9 months: he had no complaints and experienced no pain [1].

At the time of publication of our article, it was the first case describing the bone resorption around the Barricaid implant and related re-operation. This is confirmed by the conducted search in the PubMed, Scopus, Google-Scholar databases for the keywords "Barricaid," "ACD," and "anular closure device."

Given the above data, please publish our letter.

This article is part of the Topical Collection on *Infection*

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