

Comment on the Article „Mid-Term Outcomes of Revision Hip Arthroplasty with Acetabular Augments“

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Current state of the problem

The revision of the acetabular component is currently the most difficult and controversial aspect of hip arthroplasty. In most cases, the revision arthroplasty of the hip joint can be performed using a conventional uncemented hemispherical acetabular component with or without additional fixation by screws [1]. However, in the presence of large bone defects and/or pelvic discontinuity, more complex implants and substantial experience of the surgeon are required to achieve adequate primary stability and osteointegration [2]. A tantalum augment can be very effective for major acetabular reconstructions. Increased porosity, low modulus of elasticity, a significant number of standard sizes along with an acetabular component of tantalum allow for performing the necessary bone plasty. It also pro-

vides adequate osteointegration due to the properties of the material itself without risk of resorption of the surrounding bone tissue as compared to traditional acetabular components over the medium term [3, 4].


For the first time in Russia, the authors of this article presented the immediate and mid-term outcomes of successful use of tantalum augments in treating 83 patients with major acetabular defects: IIB, IIC, IIIA and IIIB according to the Paprosky classification. Of the complications, the authors report only infection and dislocation of the endoprosthesis head without mentioning the loosening of the components.

Prospects

In modern orthopedics, there is great potential for further improvement of surgical techniques and implantation technologies when performing complex acetabular revisions. Individual acetabular components made by additive technologies are currently quite expensive. In some cases they are at the stage of clinical research and do not have mid- and long-term outcomes. The use of bone grafting as an alternative to augments is not always justified, since it can lead to loosening of the components due to bone resorption [1].

• *Comment on the Article*

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A pilot study done by Korytkin et al. shows a good mid-term survivorship of tantalum augments, though not in a large group of patients. The main problems that still need to be addressed in such situations are the prevention of infection and dislocation. These complications after hip joint revision are the most common in world practice [5, 6]. However, over time, as revision surgeries grow in number and experience, in the most difficult cases it will be necessary to use alternative implants, reducing possible complications, and then to evaluate their outcomes.

Ways to achieve results

To determine objectively optimal devices and to study the long-term survivorship of various implants in the treatment of patients with significant deficiency of the bone tissue of the acetabular region, it is advisable to conduct a series of prospective comparative studies of revision surger-

ies using different implants, but the same methodology for patient selection and bone stock assessment.

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