3. COMPLEX REVISION HIP ARTHROPLASTY

Author: Vitalie Iacubitchii

Scientific advisor: Alexandru Betisor, MD, Associate Professor, Department of Orthopedics and Traumatology, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

Introduction. Total hip replacement is one of the most successful procedures in orthopedics. But 4 to 5 percent of cases may require revision surgery within 10 years and 15 percent of patients needed it within 20 years, according to a 2017 study in The Lancet. Hip joint revision surgery is performed to repair the primary prosthesis that has been damaged over time due to an infection, some of periprosthetic fractures or due to normal wear. Revision hip arthroplasty helps to fix the problem so the hip can function normally again. There are cases when just some components need to be revised, in other the whole prosthesis needs to be removed or replaced.

Case presentation. The patient, a 40-year-old man, was admitted to the Orthopedic Department of Clinical Hospital of Traumatology and Orthopedics form Chisinau accusing pain of the right hip and functional impotence. From the anamnesis, 8 years ago, being abroad, the patient was involved in car accident, resulted with right acetabular and femoral head fractures. By emergency it was performed total hip replacement with the use of the cage, 1 year later had the dislocation of the prosthesis, treated by closed reduction. After rehabilitation the patient had an active social life. For last year the patient started to have pain, then he began to limp and using two crutches. It was made radiography and was highlighted degradation of the acetabular component. In our clinic was performed revision right hip arthroplasty, with changing just of the acetabular component. Acetabular defect was Paprosky 3B, it was necessary to use bone grafting and a new cage. 1 month later the patient had the dislocation of the prosthesis, closed reduction was without good effect, it was performed open reduction and changing the femoral component. The patient is now recovering and is in period of rehabilitation.

Discussion. In most of the revisions, are used specialized implants that are designed to compensate for the damaged bone, sometime are helpful bone grafts or augments. In our clinic we have experience using of the bone grafting, usually performing good results. It is very important to have tissue bank very closed to the clinic where it is performed revision surgeries, because sometimes things can be unpredictable.

Conclusion. Primary total hip and revision hip arthroplasty have the same goals, to relieve pain and improve function and quality of life. Revision surgery is a longer, more complex procedure, requires extensive planning, as well as the use of specialized implants and tools, in order to achieve a good result. Even revision arthroplasty technologies advanced last decades, each case is individual and challenging for the orthopedic surgeon.

