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Parameters of podobarography after hip total endoprosthetics at different surgical accesses

G. I. Herzen, I. A. Lazarev, D. A. Gorban

P. L. Shchupik National Medical Academy for Postgraduate Education; State Institution of Traumatology and Orthopedics of NAMS of Ukraine

Abstract

Urgency. These days hip endoprosthetics is quite common surgery. Following prosthetics, most of the functional limb disorders were observed in the patients under treatment at the early and long-term periods after surgery. This was associated with uneven loading on the feet when walking. The objective: to evaluate the load distribution of patients' feet plantar surface after hip replacement for coxarthrosis, depending on the use of anterior lateral or posterior - lateral surgical approach. Materials and methods. The parameters of podobarography were analyzed in 120 patients before operation, at early and long-term postoperative periods after hip replacement. Herewith 60 patients underwent anterior-lateral and 60 patients - posterior-lateral approach. Results. The indices of the load by the zones of the feet plantar surfaces and the ratio of the operated-contralateral limb after endoprosthetics at the stages of functional recovery varied. The imbalance of values under the use of anteriorlateral and posterior-lateral approach can be regarded as a compensatory mechanism for the transfer of the projection of the body's gravity center to the support area due to the redistribution of muscle activity between agonists and antagonists to maintain the joint's stability after implant's positioning.

Key words: hip joint endoprosthetics; podobarography; surgical approach