**Effects of hip arthroplasty surgical procedures on static and dynamic postural stability in patients.**

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 Doctoral Dissertation - abstract

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**Introduction**

Degenerative hipjoint diseaseresults in pain and limitation of patient functional capacity. An effective method of treatment is total hip replacement procedure.

**Aim**

To assess the effect of hip arthroplasty surgical procedures on static and dynamic postural stability in patients.

**Material and Methods**

The study included 100 participants, 50 patients (aged 29-88) who underwent total hip replacement due to hip osteoarthritis between 2007-2009 and 50 patients (aged 42-90) scheduled for an arthroplasty surgical procedure. Patients were interviewed and were subjected to anthropometric, functional and balance platform tests

**Results**

In patients with degenerative hip joint osteoarthritis who underwent arthroplasty the results of the tests prove better raters than in patients with a degenerative disease scheduled for an operation.

**Conclusions**

Hip replacement surgery improves postural stability in patients, lower limb weight-bearing symmetry, functional performance and quality of life. Gait abnormalities occur both in patients with degenerative hip osteoarthritis and after hip replacement surgery. Total hip arthroplasty is effective treatment for advanced degenerative osteoarthritis among obese and normal-weight patients.