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## The level of functioning and life quality in patients following hip replacement within a period of 5 and 10 years after the operation

## Summary

**Introduction:** Osteoarthritis is a serious social, health, economic problem and it is the most common cause of disability in elderly population. In Poland according to GUS (Central Statistical Office) report from 2019 30% of the population at the age of 60 and 69 years and 44% between the ages of 70 and 79 is being treated for osteoarthritis. Due to load acceptance related to locomotion hip joint is particularly vulnerable to degenerative and deformative changes. Total hip arthroplasty is acknowledged to be a successful treatment method of advanced osteoarthritis. Advantages of total hip arthroplasty are pain reduction, increasing the range of motion which results in improvement of life quality. Predictable survival of currently used endoprosthesis is 20 years, so it is important to monitor functioning and patient satisfaction in the long-term after the operation.

**Objective:** The aim of the study was to evaluate quality of life and level of functioning in patients after total hip replacement within a period of five and ten years after the operation and to identify level of influence of different factors on life quality of patients after THA.

**Material and methods**: The test group consisted of the patients of Lesser Poland Orthopedic and Rehabilitation Hospital who had operation of primary total hip arthroplasty in the years 2008/2009 and 2013/2014. Upon application of inclusion exclusion criteria, 81 patients were qualified to the study, including 41 patients 5 years following THA and 40 patients 10 years following THA. The control group consisted of 50 healthy people chosen from the general population without diagnosis of lower extremities osteoarthritis. All the subjects age ranged from 55 to 70 years. For the assessment of life quality and functional efficiency following research tools were used:

- a) Author`s original questionnaire;
- b) Quality of life questionnaire SF-36;
- c) Modified Harris Hip Score Questionnaire.

## **Conclusions:**

1. In the assessment of life quality between patients following five and ten years after THA there is a significant difference, that is influenced by level of education and residence of the subjects. Patients five years after the surgery assess their physical health, and in particular mental health, as being lower. Professional status and family situation had no impact on evaluation of life quality.

2. There is a difference in assessment of life quality between subjects five and ten years after THA and subjects in the same age without diagnosis of lower extremity osteoarthritis. Subjects evaluated their life quality worse; the biggest difference was between subjects from a group 5 years after the operation and the control group.

3. There is no difference in functional efficiency between the groups five and ten years following THA. Subject assessed their functional efficiency as good.

4. Subject five and ten years after THA have difficulties in walking stairs as well as wearing shoes and socks. However, subjects five years following the operation complained more often about walking distance limitation.