

1. Streszczenie w języku angielskim

The process of hip joint degeneration proceeds during our whole life, because it is a weight-bearing joint and therefore it is the most exploited and at the same time especially susceptible to degenerative and distorting erosions. The current epidemiological forecasts show that one in four elderly people is going to have full symptoms of hip osteoarthritis. There are a lot of factors precipitating the pace of the pathological changes that is innate or learned skeletal system abnormalities, hard physical work, overweight, low physical activity and some diseases like rheumatoid arthritis or diabetes. The process of the degenerative changes can be delayed by conservative treatment that is pharmacotherapy or kinesiotherapy. However, in the advanced stage of hip osteoarthritis the only effective way is an operation.

The first attempts of treating hip osteoarthritis with the endoprosthesis were already made in the 19th century. The implants currently used have the features of a human bone, which makes the process of the completely biological implant healing possible as well as putting them in a bone using not cement but a wedge method. This technique proceeds the process of the patient's convalescence and by extension a faster therapeutic effect. Total hip replacement enables to eliminate the pain, restores satisfying mobility of a hip joint and improves the patient's functional efficiency. The algorithm of the early rehabilitation of the operated patient improves their efficiency and the ability to self-care.

Therefore, the main aim of the thesis is the evaluation of the early rehabilitation on the quality of the patient's life after the hip joint arthroplasty. On the basis of the main aim there were detailed aims determined. They contain the following arrangements:

- the quality of life of the patients after the hip joint arthroplasty depending on the physical, psychological, social and family functioning
- the evaluation of the athleticism of the patients after the hip joint arthroplasty in doing basic everyday life activities
- the evaluation of the impact of the mood on the process of rehabilitation

The treatment group consisted of 147 patients after the hip joint arthroplasty done in the Department of Trauma and Orthopaedic Surgery of the Cardinal Stefan Wyszyński Provincial Hospital in Łomża. 77,55 % of the patients were hospitalized because of the hip osteoarthritis and 22,45 % because of the broken hip joint diagnosed. The research material was gathered with the method of diagnostic survey involving the questionnaire technique based on the author's questionnaire and the following standardized tools: Barthel Index, Harris Hip Score, WOMAC questionnaire, Visual Analogue Scale, Acceptance of Illness Scale, Quality

of Life Assessment Questionnaire (WHOQOL-BREF) and Beck Depression Inventory Score. The respondents were asked to fill in the questionnaire on three treatment stages: before the operation, 12 days after the operation and 6 weeks after the operation.

The statistical analysis was conducted by Iwona Świącica – computer scientist, statistician with the usage of STATISTICA 7.0 programme made by StatSoft Polska company. While analysing the questionnaire data selected statistical tools were used in order to describe the collected research material, determine the credibility of the relations observed in the trial and their generalizability on the whole population.

The description in the data gathered involved their grouping-for nominal features (involving distinguishing the numerosness and frequency of occurring particular options of the analysed features) or determining descriptive statistics for measurable fetures. The results were presented in the form of condingency tables containing numerical and percentage distribution of the selected demographic features in each patient group and the selected lists In a graphic form. in order to state whether the relations observed in the trial are the effect of the more general regularity prevailing In the whole population or just an occidental result a Kruskall-Wallis non-parametric test was used and Manny-Whitney U test, Pearson coefficient, ANOVA test. It was done because of the Lack of conformity between the distribution of the variables and the normal distribution. The discrepancies with $p < 0,05$ were acknowledged as statistically important.

In the group of 147 patients qualified to the research there were 95 women (64,63%), 52 men (35,37%), There were 46,94% of people living in the country 53,06% of the people living in a town. People at the age of 51-65 years (35,37%) and the ones at the age of 66-80 years (42,86%) dominated. The respondents had National Vocational Qualification (46,26%) or secondary education (50,34%). Married people (70,75%), living most often with a spouse (46,26%) or with a spouse and children (25,85%) dominated. Most of the respondents determine their living and housing conditions as good (82,99%), whereas the others as average (17,01%). In the case of 84,21% of the patients with hip osteoarthritis were diagnosed 5 to 10 years after the pain occurred. 19,30% of the patients with this disease were diagnosed 6 years after the pain occurred . The average period of hospitalizing the operated patients was 13,17 days (SD=5,30). The objective evaluation of the physical fitness before and after the operation was done with the use standared tools. According to the Barthel's scale the patient's independence improved with every stage of the treatment. After 12 days from the operation all of the patients were assessed as people with a light disability. After 6 weeks of rehabilitation light disability was observed in the case of 53,74% of the respondents after total

hip replacement , whereas the others (46,26%) were assessed as able-bodied. Thanks to the use of HHS scale it was shown that the treatment used successfully lowered the level of the hip joint disability in the area of: feeling the pain, functionality, the lack of deformation, the range of movement (before the operation -67,60; 12 days after the operation- 54,84; 6 weeks after the operation-80,12). A distinct decrease in feeling the pain was also observed thanks to the VAS scale (before the operation-4,79; 12 days after the operation-4,69; 6 weeks after the operation-1,55). The effectiveness of the treatment used and the increase of the functional efficiency was confirmed with the use of WOMAC scale examining three basic parameters that is pain, stiffness and functionality. Thanks to the scale mentioned above the decrease in the average values could be seen.(before the operation- 27,50; 12 days after the operation-13,04; 6 weeks after the operation-8,95). It should be emphasized that despite the improvement of the health condition and the therapeutic success, a significant mood improvement or subjective assessment of the health state improvement didn't accompany the patient. This situation is a result of the process of convalescence when the patient encountered a lot of limitations. The need to use the orthopaedic equipment in order to avoid complications and achieve the best effect of the operation is not uplifting, either. Despite these difficulties, 6 weeks after the operation 89,80% of the respondents stated that they would take the decision to undergo the operation once again.

In the research the WHOQOL-BREF questionnaire was used in order to assess the quality of life. Before the operation and 12 days after it the quality of life assessment was comparable. 6 weeks after the operation this result improved a lot. The percentage of patients assessing their quality of life as good increased from 57% to 71,43%. A similar tendency could be observed in the case of the health state assessment. The percentage of patients assessing their health condition as good increased from 30% to 69,39%. The analysis of the life quality in particular areas of the WHOQOL-BREF helped to state that the quality of life in the mental, social and environmental aspect was on a comparable level whereas the assessment in the physical area significantly increased. The quality of life assessment in the physical area was comparable on the first and second stage of the research whereas its increase was observed on the third stage that is 6 weeks after the operation, It was shown that gaining physical and functional fitness and pain disappearing confirmed by Barthel, HHS, WOMAC and VAS were significant to the improvement of the life quality in the physical area. In the analysed group of people one could observe the increasing on every stage of the treatment level of accepting the disease which could be assessed with the use of AIS scale-the percentage of people with the high level of accepting the disease increased from 63,95% to

95,24%. It should be emphasized that despite the chronic disease like hip joint degeneration, depression symptoms were not observed among the respondents assessed with the Beck's scale.

On the basis of the research the following conclusions were made:

1. Early rehabilitation after hip arthroplasty contributes to the leveling of hip joint disability In the areas following areas: sensation of pain, functionality, Lack of deformatio, range of motion.
2. The therapeutic therapy undertaken after hip arthroplasty effectively increases the functional capa city of patients and re stores their ability to self-care.
3. Despite the same treatment plan, patients undergoing elective burglary were characterized by a significantly Lower of physical impairment at each of the analysed stages.
4. Each stage of treatment increased the level of accepting the disease in the study group.
5. The applied surgical treatment increased satisfaction with health and quality of life, symptoms of depression did not occur.
6. The higher the level of acceptance of the disease, the higher the assessment of the patient's health and quality of life in the social field
7. Obtaining greater functional efficiency increased the assessment of health and quality of life in all aspects

In accordance with the conclusions coming from the research conducted the following demands:

- 1) Educating the patients and their families how to proceed after the operation at a very early stage would be advisable.
- 2) Everyday physical activity keeping the patient's proper fitness used after the hospitalisation would be advisable
- 3) The best method of working with the orthopaedic patient is the patient improvement programme based on their individual needs which will have an impact on their life quality.

The above demands should be an important and indispensable element of the patient's treatment after the hip arthroplasty and the newest improvement alorythms used by the physiotherapists in an early stage of rehabilitation after the operation should be a horizontal project refering to the needs of the patients with this desease in a broad sense. Such a behaviour will allow to achieve the highest possible physical, mental and social well-being which has an impact on better quality of the patient's life.

