

Different operating approaches at THA - different results in the operating and in the early postoperative period

Introduction

There are four conventional surgical approach to the hip joint to the literature, which is in our orthopedic surgical practice commonly used:

- Anterolateral approach by Watson-Jones, often referred to as just a front, slightly modified for mounting THA
- Posterior approach to the Gibson-Moore, called in the American literature "southern"
- Front or femoral approach by Smith-Petersen
- Lateral access modified by Charnley, derived from the earlier known approaches by Ollier

The development of new prostheses and instruments, from conventional anterior (Smith-Petersen), developed the minimally invasive anterior approach and a conventional anterolateral (Watson-Jones) has developed anterolateral minimally invasive approach to the hip. From conventional posterior developed posterior minimally invasive approach to the hip. In our hospital orthopedic surgeons used conventional anterolateral approach by Watson-Jones, and therefore the standard instruments (skin incision 20–25 cm). Trauma surgeons used posterior minimally invasive approach to hip and custom instruments (skin incision 10–12 cm). The aim of this study was to investigate and determine the existence of differences with regard to the operational approach, both during surgery and in the early postoperative period.

Patients and methods

80 respondents took part in the research (40 in each group), who were hospitalized at the Orthopaedics and Trauma Department of General Hospital Varazdin, for the total hip endoprosthesis. The research was anonymous, carried out on an independent survey. An equal number of men and women (40:40) took part in the survey and the majority were aged between 60 and 70, 51 of them. For eleven respondents it was their second hip replacement, and for 60 of them it was their first operation. 57 respondents had pains in the hip for less than five years, while 27 had pains for over five years.¹⁻¹¹

Results

Duration of surgery and blood loss (during surgery and in the first 6 hours postoperatively) was less in patients with a minimally invasive approach. The pain intensity is the highest in the period immediately following the operation and on the first day in both groups. In patients with Watson - Jones approach, the intensity of pain in all the days of measuring was much higher. On a four - degree scale of medication dependence it is evident that in all the categories surveyed respondents with a minimally invasive approach have the best results, not only in the final result, but also in the time sequence. The same group has significantly better results in analgesic consumption and the number of hospitalization days.

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Discussion and conclusion

In patients with minimally invasive approach duration of operation is shorter and less blood loss during surgery and in the early postoperative period. Respondents with a minimally invasive approach achieve significantly better results as regards their independence and the need for nursing care, as well as significantly lower analgesic consumption and a smaller number of hospitalization days.

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