

## #2500 - Total Hip Arthroplasty With Direct Anterior Approach In Obese Patients With Hip Osteoarthritis: Preoperative Vs Postoperative Comparison Of Functionality And Quality Of Life

Tzeffronis, Dimitrios / Stasi, Sophia / Milaras, Christos / Sarantis, Michail / Manolis, Nikolaos / Christoforidis, Christos / Priftis, Athanasios / Lepetsos, Panagiotis / Macheras, George

### Background

Total hip arthroplasty is a successful procedure for the treatment of painful hip osteoarthritis. A large volume of literature is devoted to the patient outcomes and complication profiles of the commonly used surgical approaches to help refine the technique, enhance patient function, and limit cost and patient morbidity. Direct Anterior Approach is known for better outcomes and reduction of complications but there is no literature for results on functionality and quality of life after total hip arthroplasty with Direct Anterior Approach.

### Objectives

To compare preoperative vs postoperative levels of pain, functionality and quality of life in obese hip osteoarthritic patients who underwent THA using DAA.

### Study Design & Methods

A prospective clinical study was conducted. From 2016 to 2018 51 severely obese patients ( $BMI \geq 35 \text{Kg/m}^2$ ); average age 67.3 (49-83), with grade III & IV hip osteoarthritis (Kellgren-Lawrence) operated via DAA from the same surgeon. Patients were mobilized PWB first postoperative day. FWB allowed the second post-op week. Pain, functionality, time up and go and quality of life were measured preoperatively and at the end of the 4th and 8th postoperative week. Pain levels were evaluated with the Face Pain Scale-Revised (FPS-R); functionality was measured with the modified Harris Hip Score - Greek version (mHHS-Gr), the Timed Up and Go (TUG) test and the 9-stairs-ascend/descend test, while the quality of life was assessed with the International Hip Outcome Tool-12items - Greek version (i-HOT12-Gr). A p-value of  $<0.05$  was used to denote statistical significance.

### Results

The 4th postoperative week, pain levels were decreased by 83.0%, the total score of mHHS-Gr was increased by 37.3%, the performing times of TUG test and 9-stairs-ascend/descend test was decreased (28.5% & 23%, respectively), while the average score of i-HOT12-Gr increased by 114.3% ( $p < 0.001$ ). Comparing preoperative and 8th postoperative week measurements, it was found that pain levels were decreased to 92.3%, the total score of mHHS-Gr was increased further to 70.0%, the performing times of TUG test and 9-stairs-ascend/descend test was decreased more (46.2% & 38%, respectively), while the average score of i-HOT12-Gr reached up to 223.8% ( $p < 0.001$ ).

### Conclusions

DAA is associated with immediate significant reduction in pain levels, increased functional capacity, and dramatic improvement of the quality of life in very obese patients. It could be considered a method of choice for obese osteoarthritic patients. Further larger prospective and comparative to other approaches studies are required to confirm our findings.