



## EHS 2021 - Abstract Submission

### *Acetabular revisions*

EHS2020-ABS-1419

### ACETABULAR REVISION FOR METAL ON METAL HIP ARTHROPLASTY FAILURE. FUNCTIONAL RESULTS USING MODULAR DUAL-MOBILITY CUPS

Danilo Sebastiano Mellano<sup>1</sup>, Claudio Cuocolo<sup>1,2</sup>, Nicolò Borromeo<sup>1</sup>, Fabrizio Buzzi<sup>1</sup>, Daniela Invernizzi<sup>1</sup>, Francesco Atzori<sup>1</sup> and OSPEDALE COTTOLENGO, TURIN, ITALY

<sup>1</sup>Ospedale Cottolengo, Turin, Italy, <sup>2</sup>ORTHOPAEDIC, OSPEDALE COTTOLENGO, TURIN, Italy

**Background:** Revision hip surgery rate is increasing. Metal on metal (MoM) arthroplasty became popular in the early 2000s. National registry data reports high failure rates due to adverse reaction to metal debris (ARMD) and subsequent high revision rate.

**Objectives:** The purpose of this study is to evaluate the functional results of patients treated with acetabular revision, extensive debridement and reconstruction with modular dual mobility (MDM) cups in order to reduce the high risk of instability after revision.

**Methods:** We analyzed 7 patients treated from 01/2018 to 12/2019.

Age 60-85, mean 72,42 months. Paprosky classification was based on preoperative CT scan, MARS MRI, and intraoperative pathological anatomy after cup removal. The visual analogue scale (VAS) Harrison Hip Score (HHS) and clinical and radiographic follow-up assessment were used to evaluate the outcome.

**Results:** All patients received extensive debridement of soft tissue. 6 patients received a trabecular titanium MDM component, 1 a cemented MDM cup, 1 cup and stem revision. All patients were treated by the same surgeon. Paprosky classification was I in 1 case, 3 IIA, 2 IIB, 1 IIC. The average follow-up time was 14,7 months (range 3-24). Implant survival at last follow-up was 100%. We do not register complications. Mean VAS at last follow-up was 1.5 compared to 3.5 preop, while mean HHS improved from 54.7 points preop to 78,2 at last follow-up.

**Discussion:** Revision for MoM arthroplasty represents a small part in clinical practice of acetabular revision, varies widely in complexity due to different nature of ARMD and it is characterized by a high complication rate.

**Conclusion:** MDM cup is a good choice in the decision making process when dealing with revision arthroplasty in adult patient with high dislocation risk. The potential risk for fretting corrosion between the cobalt-chromium liner inserted into a titanium acetabular component should be considered in revision arthroplasty in young and active patients.

**Disclosure of Interest:** None Declared