

AB159. SOH23ABS_230. Case presentation: atraumatic fracture of revised ceramic femoral head in articulation with ceramic acetabular liner

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Background: We describe the case of a 72-year-old male who had previously undergone a revision hip arthroplasty for fracture to ceramic femoral head (BIOLOX Forte 28 mm +1.5) and intact ceramic acetabular insert (DePuy Duraloc Ceramic Insert 52 mm) with a revised ceramic femoral head (BIOLOX Delta TS Rev) four years from his primary (index) arthroplasty procedure for his right hip.

Methods: This patient presents to our institution through the emergency department with a sudden ‘crunch’ sensation in his right hip on getting up from his chair at home. No pain on presentation, no bruising or laceration to surrounding skin of the right hip and able to weight-bear without walking aid. Ceramic femoral head fracture confirmed on X-ray (XR) imaging. Patient history confirms a previous atraumatic femoral head fracture to the same hip 14 years ago which led to a revision procedure at the time.

Results: The patient underwent a revision arthroplasty procedure to his right hip with a new ceramic femoral head and polyethylene acetabular liner. No complications noted during revision procedure.

Conclusions: We describe the first case in the literature of an atraumatic fractured revised ceramic femoral head in the setting of a second revision procedure with a next generation ceramic head prosthesis. Fracture of a ceramic

femoral head is a rare complication though catastrophic, not only in the immediate debilitating effect on mobility but also on subsequent revision procedures due to possible third-body type wear. Early detection and prompt timely early revision procedure can abate further potential time-dependent damage to both joint environment & prostheses. **Keywords:** Atraumatic; ceramic; fracture; revision; third-body wear

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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doi: 10.21037/map-23-ab159

Cite this abstract as: Zubairu M, Troy A, Jasim S, Alsaadi D, Murphy T. AB159. SOH23ABS_230. Case presentation: atraumatic fracture of revised ceramic femoral head in articulation with ceramic acetabular liner. *Mesentery Peritoneum* 2023;7:AB159.