

## Short Term Outcome Post Core Decompression In Bilateral Femoral Head Avascular Necrosis: A Case Report

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### INTRODUCTION:

Avascular necrosis (AVN) of the femoral head is a frequent site of AVN because of its very limited collateral blood flow. We reported the short-term outcome in a young patient with alcohol related bilateral femoral head AVN treated with right femoral head core decompression (CD) surgery.

### REPORT:

A 25-year-old lady with no medical illness presented with a localized non-radiating unilateral right hip for 1 month with no significant previous history of trauma. She is a social drinker around 2 cans of beer per week (4.8 alcohol unit) for past 2 years. Otherwise, she denies any history to suggest infection, constitutional symptoms, congenital hip disease, blood disorder, and no history of steroid or traditional medications usage.

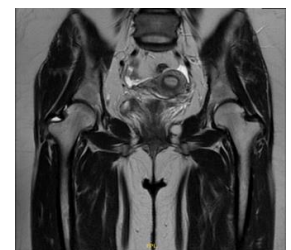
On examination she had an antalgic gait, negative Trendelenburg sign with limited range of motions over the right hip. The left hip range of motion are full. Pelvis x-ray (**Figure 1**) shown a bilateral femoral head AVN (Fecat Arlet 1). MRI of the pelvis (**Figure 2**) revealed bone edema around the bilateral femoral head (Steinberg 1) with right hip modified Kerboul angle of 215° (Grade 2). Laboratory investigations otherwise are normal.

She was then started on T. Bisphosphonate 70mg weekly for 4 months before eventually went for CD surgery (without bone graft) of the right femoral head by using 3 k-wire size 3.0 ensuring not to penetrate the subchondral bone & cortices. She was prescribed with 6 weeks of non-weight bearing crutches ambulation, followed with protected partial weight bearing ambulation for 3 months. Her right hip pain score improving with Visual Analogue Scale (VAS) from 8 (preoperative) to 1 (postoperative). The Harris

Hip Score (HHS) reduced from 70 (preoperative) to 47 (postoperative) as patient was still within postoperative protocols prescribed. The femoral head AVN shows no progression 5 months post-surgery as patient still consumed her weekly alcohol intake.



**Figure 1:** Pelvis x-ray



**Figure 2:** Pelvis MRI

### CONCLUSION:

Identification of early stage of AVN of the hip should be made early with comprehensive history, examinations & investigations. For young age patient and early disease stage (Fecat Arlet 1-2), CD surgery (with or without bone graft) is 1 of the options. Selection of CD surgery should be made with the importance to emphasis with patient to stop any reversible causes prior and after the surgery to improve the outcome post-surgery and to reduce the risk of failed CD surgery.

### REFERENCES:

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