

Reamer Irrigator Aspirator Post Masquelet Technique A HKL Experience

¹ Harwinder Singh, ² Khor Jack Kee, ² Jufitri Abd Halim, ² Zaini Mohd Fakhri

¹ Orthopaedic Department Universiti Putra Malaysia ² Orthopaedic Department Hospital Kuala Lumpur

INTRODUCTION:

Segmental femur fractures often pose a huge challenge regarding the optimal fixation choice and sequence of surgical events. We report a case of obtaining bone graft for post 1st stage of Masquelet procedure using bone graft obtained from reamer irrigator aspirator (RIA).

REPORT:

39 year old gentleman had a history of accident on 13/12/2022. Patient sustained open left comminuted intertrochanteric femur fracture extending to the left distal femur fracture with HOFFA fragment with bone lost over the middle part of femur. Patient underwent wound debridement over the left lower limb, proximal femoral nailing, left distal femur plating, cerclage wiring, screw fixation over the Hoffa fragment and 1st stage Masquelet technique procedure to address the bone defect on the 29/1/2023.

Patient underwent reamer irrigator aspiration of the right femur and bone grafting over the left femur on the 23/10/2023. Patient was placed on a traction table and reamer irrigator aspirator of the right femur was done. Reaming was done till the distal femur and reamed up to 14.5 mm size. Patient was repositioned to supine position and previous wound was opened up. Noted bone cement filled from the midshaft till the distal femur. Bone cement was removed and bone graft from the right femur was inserted to the bone defect and was enveloped with surrounding muscle. Intra op imaging showed bone graft completely filled the bone lost portion.



Figure 1: Intra medullary bone graft obtained through reamer irrigator aspirator.



Figure 2: Bone defect before (left) and after graft was inserted (right)

CONCLUSION:

The Masquelet technique is a two-stage bone grafting technique used to treat segmental bone defects. One of the methods to obtain bone graft is through reamer irrigator aspirator.

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