

ABSTRACT

INTRODUCTION:

Masquelet technique is the use of a temporary cement spacer followed by bone grafting after 6-8 weeks to manage a post-traumatic bone defect. It is a relatively new technique in which there is induction of a bio membrane around the bone defect site due to body's foreign body reaction to the polymethylmethacrylate (PMMA) spacer.

AIM:

Our aim is to study the efficacy of Masquelet's technique in the management of compound fractures of tibia associated with bone defects and infection.

PATIENTS AND METHODS:

Prospective study of 20 patients with compound fractures of tibia with bone defects managed by Masquelet technique during the period 2016-2018. We included compound fractures of tibia with bone defects upto 5 cms and excluded pediatric cases and compound fractures with intra-articular bone defects and bone defects more than 5cm .They all underwent debridement and skeletal stabilization by external fixators on the day of admission. The mean delay between trauma and bone defects treatment was 1 month.

RESULTS:

Outcome was measured by graft integration, radiological union and functional outcome. Consolidation of grafts was achieved in 85% cases. Redo bone grafting was necessary in two cases. Malalignment was seen in two cases. Overall this technique gives good results in the treatment of post-traumatic bone defects.

KEY WORDS :

Masquelet Technique, Biomembrane, Bone Defect, Bone Graft.