

748 Case Series: Experience of Using External Fixation as An Adjunct in The Management of MRONJ Affecting the Mandible

A. Shaw, R.J.J. Pilkington, A. Wilson, M. Nugent
Sunderland Royal Hospital, Sunderland, United Kingdom

Introduction: External fixation was first described by Malgaigne and Rigaud in 1870 for use on long bones, then adapted for OMFS in 1934 and used for treating comminuted fractures. In recent times, popularity of external fixators has decreased with the use of mini-plates, often only used in major trauma, for example gunshot wounds. This is a case series of patients who have been treated by external fixation for medication related osteonecrosis (MRONJ) of the jaw and could be a fairly simple alternative to major reconstructive surgery in such cases. This method of treatment has been particularly useful during the Covid-19 pandemic as a non-aerosol generating procedure.

Method: A single centre, retrospective study of 5 cases between December 2018 - December 2020. The MRONJ cases were graded using the AAOMS classification. All cases treated with external fixation of mandible were included. Pre-operative condition, medical history, treatment complications, pain management, length of treatment and follow-up results were recorded.

Results: Of the 5 cases treated for MRONJ, 4 of these had pathological fractures. All were AAOMS stage 3. The mean duration of treatment was 78 days, with regular clinical reviews monitoring progress. Of these cases, 4 cases healed well with significant improvement or closure of intraoral and extra-oral wounds.

Conclusions: In this small case series the technique has shown positive results; being well received by patients and allowing function while in situ. It allows treatment of pathological fractures as well as stabilising the mandible as a preventative measure whilst debriding severely atrophic mandibles.