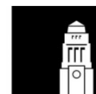
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Patient-initiated sequestrum resection in a Medicine-related osteonecrosis of the jaw (MRONJ) case

M Davies 1, A Power2, A Kanatas 3

1. DCT1 in OMFS at Leeds General Infirmary, Great George Street, Leeds, UK.

2. Specialist registrar in OMFS at Leeds General Infirmary, Great George Street, Leeds, UK.

3. Consultant in OMFS / Honorary Associate Professor, Leeds General Infirmary and Leeds Dental Institute, Great George Street, Leeds, UK.

Address for correspondence: Anastasios Kanatas, BSc (Hons), BDS, MBChB (Hons), MFDSRCS, MRCSRCS, FRCS (OMFS), MD, PGC. Consultant Surgeon / Honorary Associate Professor, Leeds Teaching Hospitals and St James Institute of Oncology, Leeds Dental Institute and Leeds General Infirmary, LS1 3EX.

Tel: 00447956603118 e-mail: a.kanatas@doctors.org.uk

Medicine-related osteonecrosis of the jaw (MRONJ) is a rare complication to dento-alveolar surgery following treatment with anti-resorptive or anti-angiogenic agents. [1] Patients may be considered to have MRONJ if all of the following characteristics are present: current or previous treatment with anti-resorptive or anti-angiogenic agents, exposed bone or bone that can be probed through an intraoral or extraoral fistula(e) in the maxillofacial region that has persisted for more than eight weeks and no history of radiation therapy to the jaws or obvious metastatic disease to the jaws. [2] The major risk factor in MRONJ is the underlying pathology being treated. Patients undergoing cancer treatments have a more complex risk factor profile than those being treated for osteoporosis alone. Other risk factors include; dentoalveolar surgery, duration of drug therapy, other concurrent medication use such as steroids and route of delivery of the drug. [3] The current management of MRONJ falls broadly into 3 categories consisting of conservative, surgical and additional therapies. Which management strategy to choose provides a challenge to the clinician and should be done on a case by case basis as no gold standard for treatment has been decided upon. [4] In this later we present a 75-year-old man who was referred by his GDP with a non-healing socket following dental extractions in the right mandible. At the time of the extractions, he was undergoing treatment for multiple myeloma with intravenous infusions of zoledronic acid. On presentation, he had developed a large (5x3cm) bony sequestra in the LRQ extending from LR1 to LR5 region as seen Figure 1. This was causing significant discomfort and the patient was keen to have surgical debridement. Whilst awaiting a surgical exploration and debridement, he was prescribed 2 weeks oral metronidazole, topical chlorhexidine mouthwash and analgesia.

One month later he was seen in clinic, at which time he reported removing the sequestra himself at home with a screwdriver. On examination, the LRQ was healing well with no signs of infection or remnants of exposed bone as shown in figure 2. At present, there is no consensus as to the ideal way to manage MRONJ patients. [4] Wherever possible patients

should be made dentally fit prior to starting any anti-resorptive or anti-angiogenic agents in order to reduce the risk of MRONJ developing. [1,2,3] Treatment is currently based around management of symptoms, prevention of further issues and surgical intervention as required.

Regardless of staging, any mobile bony sequestrum should be removed to facilitate good soft tissue healing whether it be from a surgical approach or in some cases, removed by the patient.

Conflict of interest: The authors have no conflict of interest to report

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Figure 1: Clinical appearance of necrotic bone at presentation

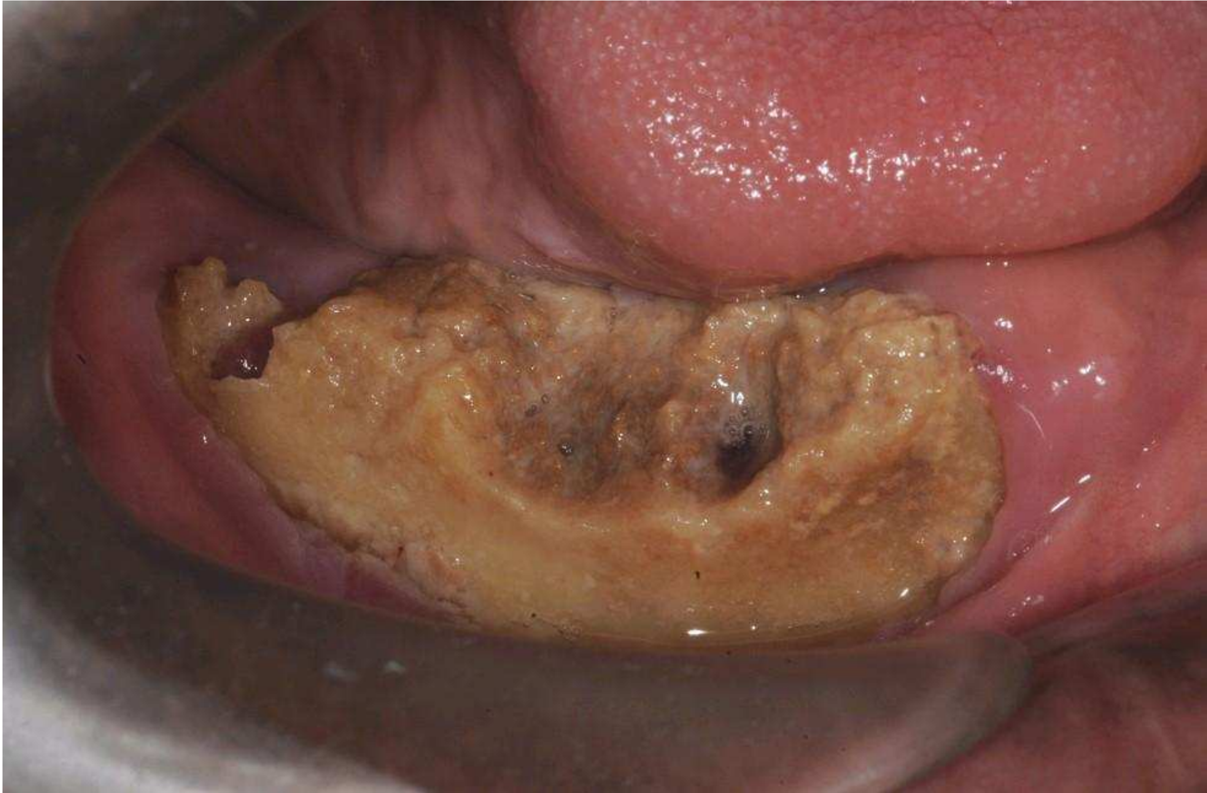

Figure 2: Clinical appearance of the right side of the mandible following the removal of the necrotic bone by the patient