Do Patients at Risk of MRONJ Need their Dentist More than Ever? A Case Study and Reflection

Brandon Owen[1], Hannah Bradley[2] and Grainne McGrath[1]
1. Glasgow Dental Hospital, 2. Aberdeen Dental Hospital

INTRODUCTION

In March 2020, COVID-19 resulted in the cessation of routine dental services in Scotland. Despite routine care in general practice recommencing in November, difficulties still exist accessing care due to the ongoing restrictions. We present the case of an older patient with MRONJ and reflect upon the impact of COVID-19 on their care.

PRESENTING COMPLAINT

Attended the oral surgery department reporting:

- Inability to see her GDP due to practice restrictions
- Difficulty chewing as a result of a loose, uncomfortable denture which is removed when eating.
- Pain from multiple teeth

82 y/o Female

SOCIAL HISTORY

- Non-smoker
- No alcohol
- Lives with husband, no dependents

MEDICAL HISTORY

- Lupus
- Osteoporosis
- Hypothyroidism

MEDICATIONS

- Oral alendronic acid (7-year history)
- Edoxaban
- Hydroxychloroquine
- Thyroxine
- Calcichew

DENTAL HISTORY

- 4 year history post-extraction MRONJ affecting the LR7 site. Multiple previous infections
- New P/- Nov 2019 resulted in denture-induced MRONJ affecting the left posterior maxillary ridge

EXAMINATION

- Exposed bone LR7 socket with food debris but no evidence of loose bone or infection
- Resolution of MRONJ affecting left posterior maxilla
- Poor retention and stability of upper partial denture
- UR1 buccal sinus, pain on palpation and percussion
- UR6 palatal caries, positive response to cold testing
- Suboptimal oral hygiene, multiple other carious teeth
- Teeth visible clinically

6 3	1
5 3 2 1	1 2 3 7

SPECIAL INVESTIGATION

- Orthopantomogram (OPG) (figure 1) for assessment of MRONJ and failing dentition

DIAGNOSES

- MRONJ: Stage 1 LRQ, resolved ULQ
- Caries: UR6, UR1, UL3, LR5, LR3, LR1, LL3, LL7
- Acute exacerbation of a chronic apical abscess UR1
- Reversible pulpitis UR6

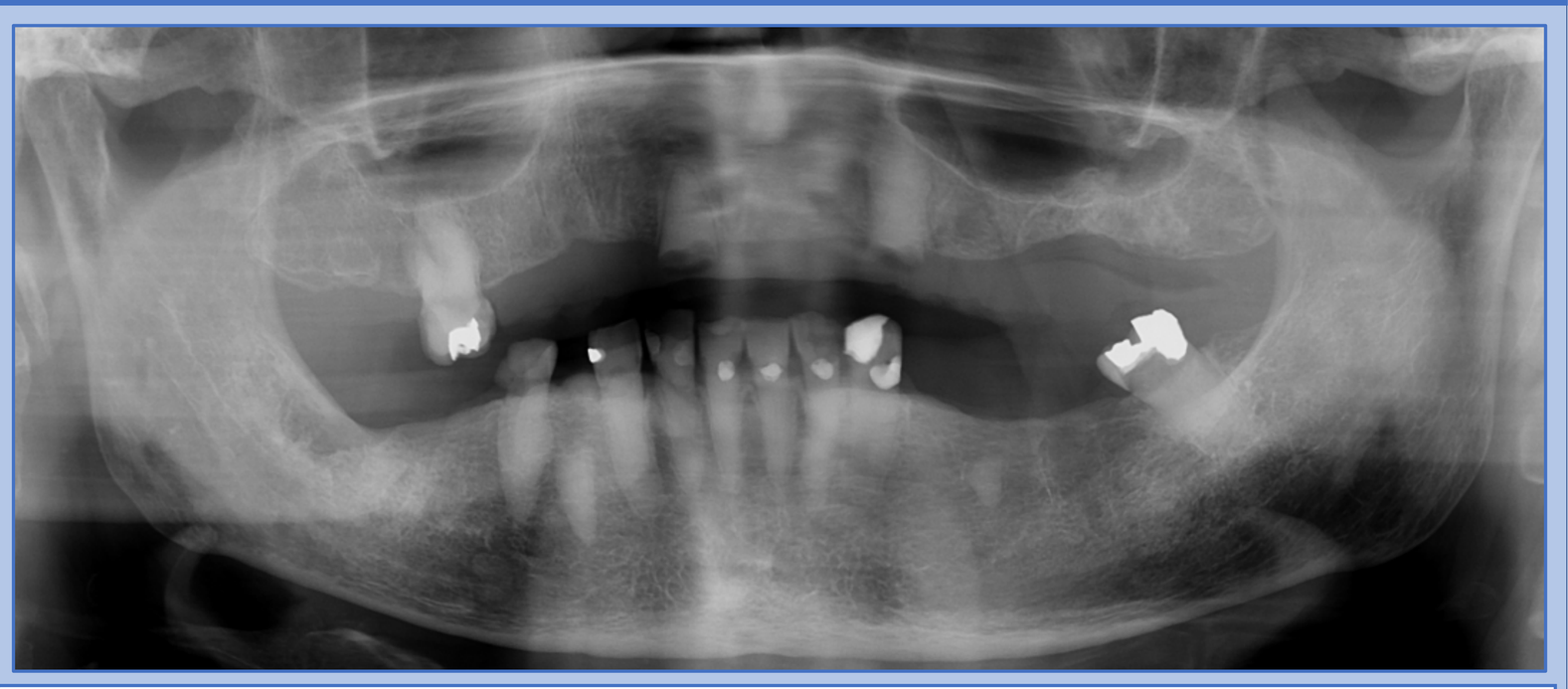

Figure 1: An OPG demonstrating MRONJ in the right posterior mandible amongst a failing dentition.

MANAGEMENT PLAN

Conservative management of MRONJ due to the absence of symptoms, infection or loose bone.

1) Regular warm salty rinses and irrigation with a Monoject. Avoid trauma when eating.
2) UR1 extraction advised to ease pain and infection. Patient opted to consider her options.
3) Liaise with GDP for prevention, restoration of dentition and necessary denture adjustments whilst planning a new P/-.
4) 3-month review. Patient to contact us sooner if required.

REFLECTION

COVID-19 and Access to Dental Care

MRONJ patients require regular reviews to allow prevention and early identification of disease. However, access to dental care throughout the COVID-19 pandemic has been a challenge for patients, particularly those who are shielding. This patient's oral health declined and she is now facing extractions which may be detrimental to her quality of life, especially considering her higher risk of MRONJ.[1] This patient perceived dental care to be unavailable but patients, particularly those who are shielding, must feel able to contact their dentists if there are problems.

The Patients Dilemma

A perceived inability to access primary care meant this patient persisted with her dental issues. Removing her unretentive denture likely helped resolve MRONJ affecting the left maxilla but compromised the right posterior mandibular MRONJ due to repeated trauma from a lone standing molar she used to function. The patient was faced with a dilemma while weighing up the options for her UR1 since leaving this in situ may act as a precursor for MRONJ, as may its removal. The patient was fearful of developing further MRONJ and wanted time to consider her options despite being in pain.

The Role of the GDP and the Need for Improved Patient Pathways

In our oral surgery department, the GDP is integral to the management of MRONJ patients as they provide monitoring and maintenance to avoid extractions. This link is vital and allows efficient and predictable delivery of care. However, COVID-19 presents a serious challenge coordinating patient management with primary care. Current regulations have reduced capacity across all areas of dentistry and is complicated further by large waiting lists which have accumulated and the need to prioritise acute pain and infection. Many MRONJ patients who are asymptomatic may therefore remain under the radar. Due to the current uncertainty coordinating management with primary care, it is vital we form effective multidisciplinary pathways for higher risk MRONJ patients within the hospital so that urgent care can be accessed without delay.

KEY LEARNING POINTS

- Prevention of disease, early intervention and minimising the need for invasive procedures is important in patients at risk of MRONJ. This is achieved by;
  - Prioritising care for these patients
  - Creating accessible multidisciplinary pathways
  - Strengthening relationships with GDPs

REFERENCE

1) Murphy J, Mannion CJ. Medication-related osteonecrosis of the jaws and quality of life: review and structured analysis. British Journal of Oral and Maxillofacial Surgery. 2020 Apr 1.