Management of a patient with neuroendocrine cancer and metastases – a case report

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Introduction

A 66-year-old female patient presented with apical periodontitis related to the LR5, which had a poor prognosis. She was referred to Oral Surgery for a second opinion about extracting the LR5. This was due to her complex medical history, and a history of developing medication related osteonecrosis of the jaw (MRONJ), as she was on long term IV zolendronic acid.[1] The patient also reported some anxiety about dental treatment.

Case Report

MEDICAL HISTORY

- Neuroendocrine cancer (primary in lungs)
- Malignant brain tumour – surgery and radiotherapy
- Spinal and bone metastases
- Depression
- Hypertension
- Anaemia
- Allergy to clarithromycin

Female 66 years old

SOCIAL HISTORY

- Lives with husband
- Has capacity to consent
- Smokes 20 a day for over 40 years
- Alcohol: 0 units

DENTAL HISTORY

- Regular attender
- Reports a low sugar diet and brushes twice a day
- Previous dental extractions under IV sedation
- Restorations have previously been completed with the use of WAND (computer assisted local anaesthetic delivering system which reduces pain experienced during infiltrations)
- Reported anxiety about root canal treatment (RCT)
- 2018 – LR6 was extracted, and resulted in MRONJ
- 2021 – LR8 was extracted, and healing took 7 months

MEDICATION

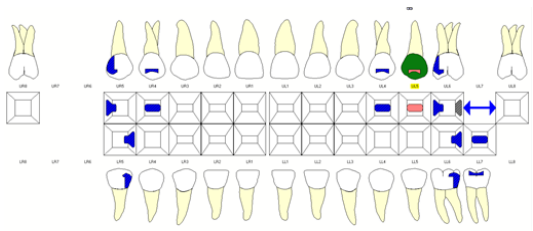
- Amitriptyline 50mg
- Doxazosin 2mg
- Ferrous sulfate 200mg
- Lansoprazole 30mg
- Morphine sulfate 10mg/5ml
- Zomorph 100mg
- Bisacodyl 5mg
- IV zolendronic acid (6 weekly infusions)
- Senna
- Naproxen
- Lanreotide

Examination

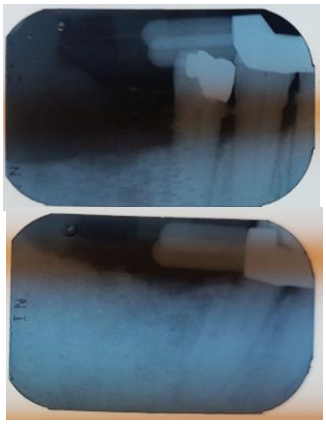
Extra Oral: nad
Intra Oral:

- LR5 chronic sinus draining buccally. Grade II mobile.
- Mild dry mouth. Challacombe scale[2] = 1
- Oral hygiene: poor with generalised plaque and calculus

BPE: 323/223
Hard tissues:



Radiographs:



Periapical radiographs of the LR5.

Diagnoses

- LR5 apical periodontitis
- Generalised periodontitis, stage 3, grade B, currently unstable, risk factors - smoker and poor oral hygiene
- Drug – induced xerostomia

Treatment Plan

1. Prevention – sodium fluoride toothpaste 1.1% prescribed and topical fluoride varnish placed. Intensive oral hygiene instructions were given.[3]
2. Smoking cessation advice provided[3]
3. Professional mechanical plaque removal
4. RCT LR5 with the use of WAND
5. Recall 3/12 due to high risk factors.[4]

Challenges

- **Motivation**: fluctuating motivation with regards to oral hygiene and therefore periodontal treatment has been unsuccessful in the past.
- **Smoking cessation**: Patient did not want to engage with advice.
- **Polypharmacy:** Drug – induced mild xerostomia not affecting quality of life at present. Preventative and management advice was given.
- **Management of anxiety:** related to previous bad experience of root canal treatment. Use of WAND suggested as it has been successful with restorations.
- **Treatment adaptation**: Bone pain due to metastases to the spine. May need to offer short appointments and provide cushions.
- **Long – term management:** grade II mobile root filled LR5 may exfoliate naturally over time avoiding MRONJ.
- **Barrier:** Patient may be attending multiple hospital appointments and may delay treatment due to this.

Discussion

This case demonstrates that due to complex medical comorbidities, we may have to at times restore teeth that have a poor prognosis. It also highlights the necessity of gaining a second opinion and referring to oral surgery even when extractions appear 'simple', due to a history of MRONJ. The case also highlights methods other than conscious sedation that can be used to manage patient anxiety, such as the WAND.

References

1. SDCEP. Oral Health Management of Patients at Risk of Medication-related Osteonecrosis of the Jaw. 2017.
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3. Public Health England. Delivering better oral health: an evidence-based toolkit for prevention. Fourth edition. 2021
4. NICE. Dental recall guidelines. London: National Institute for Health and Clinical Excellence; 2004.

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