Multidisciplinary Approach to a Domiciliary Patient

Nicola Brown – Dental Officer CDS-CIC

Introduction

The UK has an ageing population, with more than 12 million people aged 65 and over.[1]
In 2019 Age UK estimated that 1.4 million older people did not have access to all the healthcare and support they needed.[2]
This case study focuses on a domiciliary patient, and the complex, multidisciplinary approach required to provide adequate and compassionate care.

Case Report

Medical History

Rheumatoid arthritis
Epilepsy
Diabetes
Agoraphobia
Ovarian cancer (2014, remission 2017)

Medications

Allergy – Iodine and Elastoplast
Aspirin
Atorvastatin
Carbamazepine
Duloxetine
Fentanyl transdermal patch
Furosemide
Gabapentin
Sodium Valproate
Metformin

Female
76
ASA III

Dental History

Agoraphobia has prevented the patient from accessing dental care with for the past five years.
Self-referral to CDS for domiciliary care.

Social History

Patient lives alone with no close relatives.
Patient can walk short distances with a walking frame, and transfer into the dental chair with assistance.
Support worker appointed to assist with healthcare appointments.

Initial Examination – Domiciliary Visit

Initial examination carried out as a domiciliary appointment, following self referral from the patient.

Presenting complaint

- A dry, burning mouth, and multiple broken teeth causing trauma to the patient's tongue.

Extraoral Examination

- Dry cracked lips.

Intraoral Examination

- **Soft tissues** – minimal pooling saliva, dry fissured tongue.
- **Oral Hygiene** – poor oral hygiene with plaque and calculus deposits in all quadrants.
- **Carious lesions** – LL8, LL7, LL6, LR6, UR4
- **Retained roots** – UL4, UL5

Teeth Present

7 54321	12345 78
8 6 4321	1234 678

Treatment Modifications

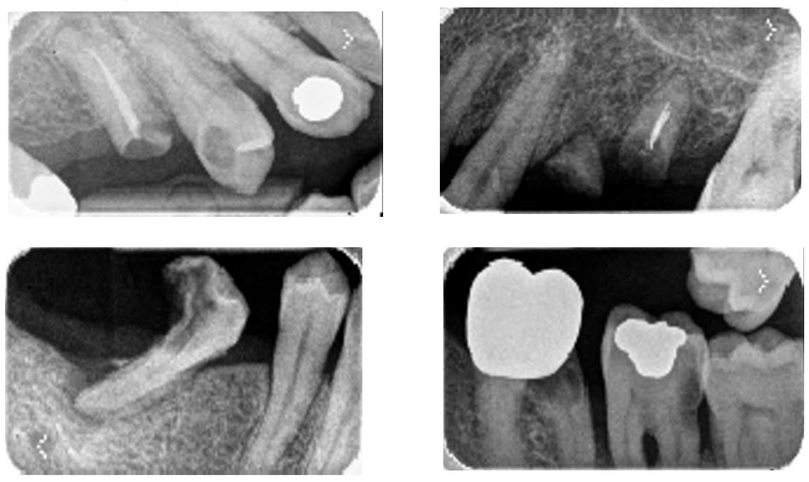
Access- Agoraphobia has denied the patient access to clinic based dental services for the past five years. Following an initial domiciliary assessment, a decision was made with the patient to liaise with her GP in order to facilitate access to our local clinic. Clinic access was deemed necessary for radiographic assessment, and potential surgical extractions.

Communication – communication with multiple healthcare professionals was key from the outset for this case. Discussion with the patient's GP allowed onward referral for the patient to access cognitive behavioral therapy, and access to a support worker regarding her agoraphobia. Phlebotomy services were also key in diagnosis and treatment of the patient's dry, burning mouth.

Surgery – at the initial domiciliary visit, a number of teeth were identified as requiring extraction. The patient acknowledged that radiographs would allow for a more definitive treatment plan, and therefore this opened the discussion with the patient about accessing our local clinic. It was also identified that several teeth had the potential need for surgical removal, as well as the risk factors of increased risk of bleeding due to medication and age. The patient was highly motivated by the desire to stabilize and maintain her dentition and felt with additional support she may be able to access our clinical services.

Clinic Appointments and Stabilisation

Radiographs



Stabilisation Phase

1. Referral to GP for blood tests to investigate iron, folate and vitamin B12 levels.
2. Prevention
   - Duraphat toothpaste 5000ppm, sodium fluoride mouthwash to be used separately to brushing.[3]
   - Silicone putty adaptation of manual toothbrush handle due to RA reducing manual dexterity.
   - Saliva substitutes to ease symptoms of dry, burning mouth.
   - Dietary advice
   - Fluoride varnish applications.
3. Hygiene appointments to reinforce oral hygiene, scaling and fluoride application 3 monthly.
4. Restoration under LA LL8, UR4.
5. Extractions under LA LL7, LL6, UL4, UL5, LR6.
6. Recall at 3 months due to increased caries and periodontal risks.[4]

Challenges and Risk Assessment

Medical

- Rheumatoid Arthritis – limitations of dexterity for oral hygiene. Manual toothbrush adapted with silicone putty grip to allow greater comfort when brushing.
- Epilepsy – well controlled focal-onset seizures. Anxiety a known trigger.
- Agoraphobia – limitations of appropriate and safe provision of dental care on a domiciliary basis, with additional consideration to potential surgical extractions.
- Ovarian Cancer – no history of metastatic spread, or anti-resorptive or ant-angiogenic medication.

Medications

- Aspirin – increased bleeding risk due to anti-platelet action.
- Sodium Valproate –increased bleeding risk due to impairment of platelet aggregation.
- Duloxetine – potential xerostomia action.
- Carbamazepine – potential xerostomia action.[5]

Social

- Patient lives alone and does not have any local family members to support her at healthcare appointments.
- Patient requires support to attend any appointments outside of her home. All appointments needed to be coordinated with her support worker.
- Patient provided with verbal and written instructions for each stage of treatment, including clear post extraction advice.

Dental

- Caries Status – diet identified as high in cariogenic foods. Patient is high risk for future active carious lesions.
- Periodontal Status - Poorly controlled diabetes, loss of manual dexterity due to RA and existing active periodontal disease mean the patient is at high risk of progression of bone loss.

Future Considerations

In accordance with the risk factors identified above, a NICE recall period of 3 months was agreed with the patient.[3]
Care for the patient continues on a domiciliary basis, allowing us to continue to support her ongoing dental needs.
Ongoing communication with the patient's GP and support worker has been key to the success of this patient's dental journey.
Should the need for further appointments within clinic arise, a clear and successful network has already been established for this patient.

Conclusion

With an ageing population, our approach to care and management of medically complex and compromised individuals often requires multidisciplinary care, with input from multiple healthcare specialties.
The role of the domiciliary dental team is often key to this, allowing initial assessments, diagnosis and forward planning for those who may struggle to access clinic based dental appointments.
This case demonstrates that with input and planning from multiple healthcare professionals, dental care is, and should be, accessible for all our patients.

References and Acknowledgements

With thanks to the patient for their consent to submission of this poster.
With additional thanks to Yee Lee and CDS-CIC Bedfordshire for their support with this case.
Community Dental Services – Improving Oral Health In Ever More Communities

[1] Age UK. Later Life in the UK. (2019). Available at: https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/later_life_uk_factsheet.pdf (Accessed 22 Nov 2020)
[2] CQC: The State of Health Care and Adult Social Care in England 2018/19. Available at: STATE OF HEALTH CARE AND ADULT SOCIAL CARE IN ENGLAND 2018/19 (cqc.org.uk)
[3] Public Health England. (2014). *Delivering better oral health: an evidence-based toolkit for prevention (Third Edition).*
[4] National Institute of Clinical Excellence (NICE) (2004). *Dental checks: intervals between oral health review; CG19*SIG.
[5] B.E.S. Dawoud, A.Roberts and M.J.Yates. 2014. Drug Interactions in General Dental Practice – Considerations for the Dental Practitioner. *BDJ 216: 15-23.*