

Domiciliary Dental Care: To go, or not to go, that is the question?



Sarah Pick
Specialist Registrar in Special Care Dentistry
Community Dental Service
Aneurin Bevan University Health Board



Bwrdd Iechyd Prifysgol
Aneurin Bevan
University Health Board

Introduction

- Care home residents are vulnerable to COVID-19¹.
- Outbreaks in care homes have proven to be devastating (table 1).
- Domiciliary standard operating procedures (SOPs) and risk assessments have been adapted to minimise COVID-19 transmission.
- However, the decision “to go, or not to go” is a difficult one and must be risk assessed.
- This case report highlights the new approaches and risk assessments required in a COVID-19 world to manage a vulnerable high-risk patient in a care home.

Male		Female	
COVID - 19	33.5%	Dementia and Alzheimer disease	33.8%
Dementia and Alzheimer disease	24.7%	COVID - 19	26.6%
Cerebrovascular diseases	4.4%	Symptoms signs and ill-defined conditions	7.0%
Ischaemic heart diseases	4.0%	Cerebrovascular diseases	5.0%
Symptoms signs and ill-defined conditions	3.4%	Ischaemic heart diseases	3.1%

Table 1: Leading cause of death amongst care home residents from 2 March to 12 June 2020, registered up to 20 June 2020, in England and Wales¹.

Case Report

LP, Female 85-Years Old

Medical History

- Intracranial tumour April 2019 (palliative care)
- Intracranial tumour affects:
 - Optic nerve causing blindness left eye
 - Memory loss
 - Charles-bonnet syndrome
- Squamous Cell Carcinoma (SCC) left trigeminal nerve and its branches December 2018
- Palliative radiotherapy February 2019
- Ischemic Stroke June 2019
 - Left sided weakness
 - Left facial weakness
 - Left ptosis causing complete closure of left eyelid
- Dementia
- Hypothyroidism
- History of falls

Social History

- Lives in care home, duration approximately 2 years
- Mobilises with 4 wheeled walker and wheel chair
- No family
- Neighbour as lasting power of attorney (LPA) for health and welfare
- Retired teacher
- No history of smoking
- No history of excessive alcohol

Dental History

- Referred by GDP to CDS via COVID-19 E-referral
- No dental history available from GDP (not seen patient before)

Reason for Referral

- Patient had acute left-sided facial swelling and pain originating from lower left tooth
- No response from advice, analgesics or antimicrobials (AAA) approach.
- Difficulty eating

Medication: Levothyroxine, Clopidogrel, Lansoprazole, Lactulose, Senna, Xailin night lubricating eye ointment, Morphine sulphate. **Allergies:** ACE Inhibitors.

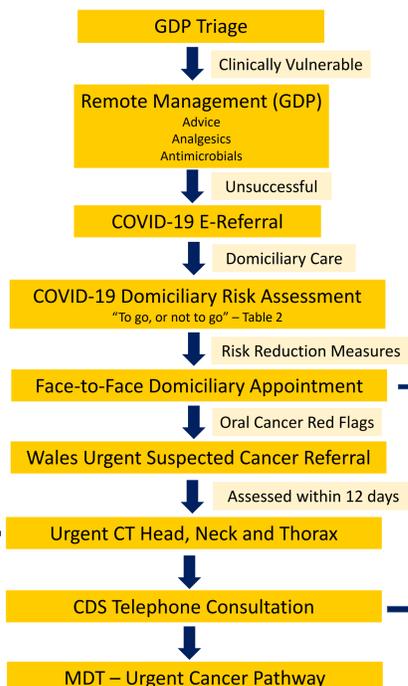
COVID-19 Domiciliary Risk Assessment

- Delivering domiciliary dental care for patients during the amber de-escalation is not without risks².
- Domiciliary dental care increases the risk of contracting COVID-19 for both the dental team and patients/carers³.
- A dental risk assessment (table 2) is undertaken and risk reduction measures identified.
- As local and national lockdowns continues, keeping up to date with information regarding the level of circulating COVID-19 within the population will further influence risk and benefit decision in providing domiciliary care.

Table 2: Clinical reasoning to help weigh up risks and decisions regarding LP's domiciliary visits⁴.

Person specific Covid-19 risk factors	No COVID-19-Symptoms. COVID free care home. Vulnerable patient due to complex medical history and frailty.
C19 risk level of the care home/local area	Yellow (level 2) on care home visiting thermometer ⁴ .
Environmental factors	Can the number of people the dental team come into contact within the care home be minimised? YES, separate room close to care home entrance to be used. Agreed to be met by care home nurse in charge. No other members of staff required. Does the visit involved going into high contact areas e.g. kitchen, bathroom – NO.
Proposed reason for home visit	Persistent acute left-sided facial swelling non-responsive to AAA approach causing difficult eating.
What remote options have been considered/ tried? what was the outcome of these?	Telephone triage by GDP, AAA provided – swelling persists. Video call with GP advises to see dentist. Are there individual risk factors that cause concern? Difficult eating, weight loss, pain.
Has the person given informed consent for home visit?	Is the person able to give informed consent in view of the risks for C19? No-dementia. Care home confirms LPA – Neighbour. LPA contacted via telephone. Aware that patient in dental pain and agree with domiciliary visit and any necessary treatment, in patient best interest.
Risks of harm if face to face visit was not carried out?	Continued dental pain affecting quality of life. Further weight loss. Sepsis, continued swelling affecting airway
Clinical reasoning for outcome of risk assessment	High risk of life-threatening emergency if not seen face to face to ensure correct diagnosis of swelling and appropriate treatment. Low risk of COVID-19 transmission to care home residents with risk reduction measures in place.
Review plan	Harm may increase the longer the face to face appointment is postponed. Recurrent lockdowns imminent due to increasing cases within the community. To visit now prior to future lockdown. The risk of harm (facial swelling not seen clinically and not responsive to antibiotics) requires further investigation and outweighs the risk of COVID-19 transmission with risk reduction measure in place to deem a community visit safe.
Communication with others	Agreed by care home staff, LPA, dental team.

Patient Journey



Domiciliary Appointment

Presenting Complaint: Persistent left-sided facial swelling > 3 weeks. No verbal complaints from patient although challenging to obtain a history from the patient due to dementia. Advised by carers that antibiotics (Amoxicillin and Metronidazole) had not improved swelling. Carers felt the swelling had increased in size. Difficulty eating (soft diet), no dysphagia. Weight loss 52.9kg – 49.6Kg.

Examination: In wheelchair.

Extra-Oral: Left submandibular swelling - soft and non-tender. Overlying skin soft, no colour changes, no discharge. Left facial weakness and left ptosis (effect from stroke).

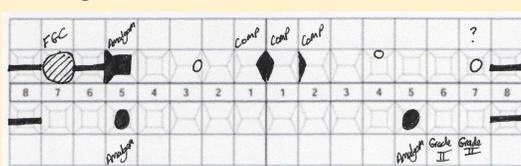
Intra-oral: Soft Tissues:

- Hard buccal swelling adjacent to LL4-LL7 with gingival telangiectasia, buccal expansion and very tender.
- Facial grimacing on palpation of intra-oral swelling indicating pain.
- Plaque coated tongue. Poor oral hygiene with generalised food packing and plaque deposits.

Hard Tissues:

- LL5 grade I mobile. LL6, LL7 grade II mobile.

Dental Charting:



Differential Diagnosis (swelling):

- Inflammatory:** periodontal abscess
- Odontogenic Cyst:** radicular cysts, paradental cyst, odontogenic keratocyst.
- Odontogenic Tumour:** ameloblastoma, calcified epithelial odontogenic tumour, adenomatoid odontogenic tumour.
- Giant Cell Lesion:** giant cell granuloma, Brown tumour.
- Malignancy:** squamous cell carcinoma.

Treatment Plan:

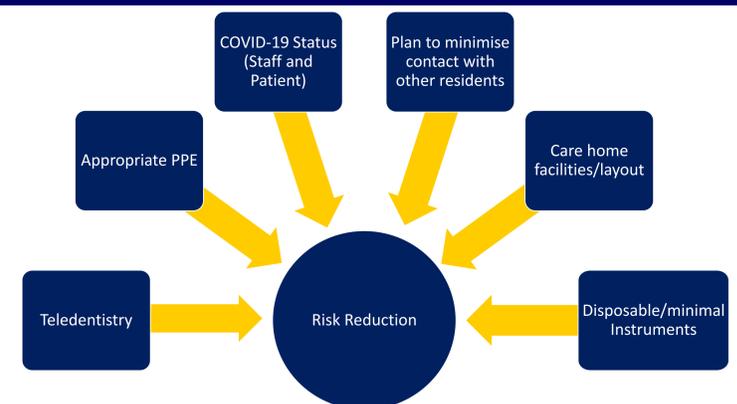
- Urgent Suspected Cancer (USC) Referral.**
Persistent swelling >3weeks, increasing in size, weight loss, tooth mobility, current cancer diagnosis.
- Prevention:** High Fluoride Toothpaste, Chlorhexidine gel, Oral hygiene demonstration to care home staff member, Topical F placed on carious lesions (restorations considered non-urgent treatment).
- Review following referral outcome.**

Telephone Consultation

- Carers concerned regarding increasing swelling and contacted CDS for advice.
- Patient in pain managed with paracetamol and oramorph by GP.
- Swelling described as reddish/purple and increasing towards the chin.
- CT scan viewed, no report available.
- OMFS SHO contacted, CT scan viewed by consultant confirming sinister appearance of swelling and reassured patient on urgent cancer pathway.
- Advised by OMFS any sign of infection to give antibiotics. Follow-up with OMFS as soon as CT report received.
- Care home contacted, patient triaged for signs of infection: normal temperature, area not hot/erythematous, no pus discharge.
- Photo requested to confirm clinical appearance.
- Risk assessment completed “to go, or not to go?”
- Antibiotics not justified, no benefit identified for face to face management and possible risk of COVID-19 transmission.
- LPA informed possible sinister lesion requiring OMFS follow-up.

Figure 1: Computerised tomography sections showing an avidly enhancing and destructive mass involving the left hemi-mandible which just crosses the midline (white arrows). Anteriorly the lesion is about to fungate through the skin (red arrow).

Risk Reduction Measures for Domiciliary Visit to Care Homes⁵



Discussion

COVID-19 has hit the older vulnerable population the hardest, further limiting access to oral health care and routine dental check-ups within care homes². Screening of the oral cavity have been significantly reduced impacting on early oral cancer diagnosis with USC referrals down by 65%⁶. This will undoubtedly impact patients who will present with tumours at an advanced stage that will require more complex treatment, poorer prognosis, or palliative care^{7,8}. A report by the Oral Health Foundation reveals approximately 16% of people will have experienced at least one of the potential early warning signs of mouth cancer during lockdown and not have been able to seek professional help⁶. For vulnerable or shielding older people, not accessing dental care when they need to could be detrimental and even fatal to their general health².

As dental professionals we must support older people and care homes through this challenging time. To raise awareness that care will be provided safely underpinned by risk assessment and risk reduction measures to protect the most vulnerable in our society. Education to care home staff and other visiting professionals on oral cancer symptoms and prevention via national programmes, for example Gwên am Byth and Mouth Action Month, may further prompt urgent referrals during this period whereby opportunistic screening has been significantly reduced.

Conclusion

- Teledentistry is an innovative method of health service delivery that can aid triaging of patients and follow-up consultations⁹.
- There are limitations to this technology in patient with communication, cooperation, or visual/hearing impairments.
- Furthermore, a clinical examination cannot be conducted, and video clinics cannot provide good definition to facilitate examination of the mouth¹⁰.
- The decision “to go, or not to go” requires a thorough risk assessment and sound clinical reasoning.
- With the risk reduction measures in place, the decision “to go” is often the right one as this case highlights.

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