Adopting a new way of thinking

Emergency dentistry in the recovery phase of the COVID-19 pandemic

WORDS
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Introduction

Following the postponement of routine dentistry during the COVID-19 pandemic, there is an inevitable national backlog of untreated dental disease. Dentists must now re-evaluate how dental services are prioritised. The road to recovery requires a novel approach in the delivery of dentistry. Providing pain relief and effective management of acute infections must now be prioritised instead of routine dental care. Consideration must be given to environmental concerns which result in fewer patients being examined within the same time frames. These are uncomfortable times in dentistry, but we must adopt a new way of thinking as returning to normal is impossible.

Throughout the recovery phase of this pandemic dentists must strictly adhere to protocols which enable the safe triaging of patients in relation to their likelihood of carrying COVID-19 infection. The donning of appropriate personal protective equipment(PPE) is table stakes. Extreme care in accordance with practice policies must be taken during aerosol generating procedures. Urgent dental care must be prioritised following a stringent triage system. It is important that footfall is decreased in clinics to ensure social distancing which protects patients and staff.

Wherever possible dentists must underline the importance of prevention in dental health for each patient. Each dentist must strive to perform procedures which result in the lowest aerosol exposure. It is really important that dental services continue to be accessible to all patients including those who are shielding or those who are socially vulnerable. Dental teams must be able to prioritise urgent dental care. Each patient must receive individualised oral health advice. Dentists must take every opportunity to recommend smoking cessation and this is particularly important in the field of oral surgery.

FFP3 masks without valves

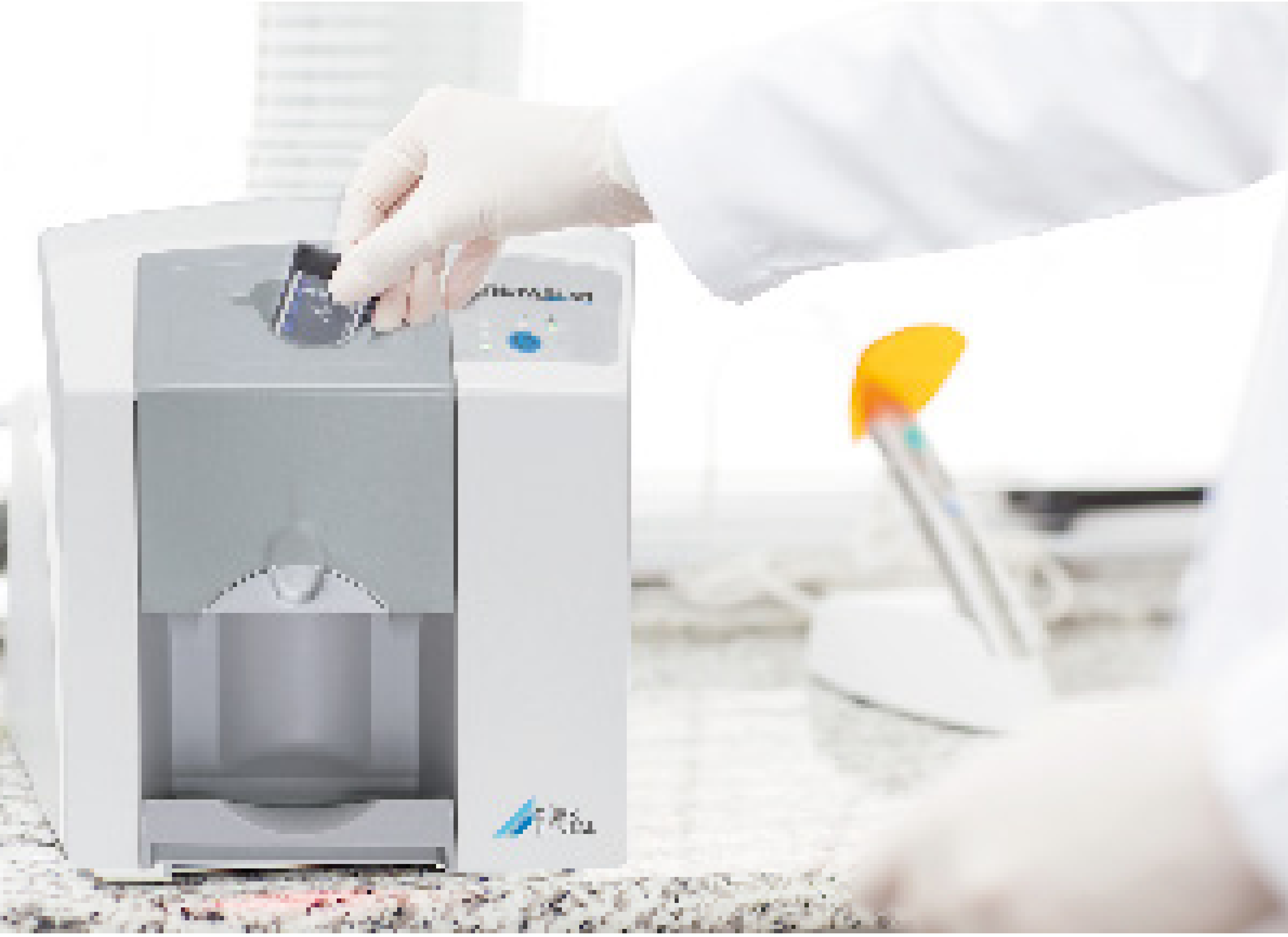
Asymptomatic dentists can be COVID positive. Asymptomatic dentists pose a risk to patients and the dental team. This risk is obviously increased during oral surgical care where close proximity is required for an extended appointment. Good hand hygiene and social distancing is important where possible.

It is important for dentists to understand that different masks offer variable levels of protection for patients. Valved FFP3 masks represent a higher risk as they direct unfiltered exhaled air towards the patient. As dentists can be COVID-positive and asymptomatic it is important to consider the role of PPE in protecting patients.

FFP3 masks that have no valve provide 99 per cent reduction in aerosol for both the dentist and patient. FFP3 with an exhalation valve is more comfortable by design,

Behind Closed Doors...

Process images without leaving the room



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however they permit unfiltered breath to be exhaled towards patients when in close proximity. It is therefore recommended that dentists avoid using FFP3 masks with exhalation valves when interacting closely with patients.

If a dentist has FFP3 masks with exhalation valves then a surgical mask must be used to cover it and protect the patient. Full face visors also provide extra protection to both the patient and dentist. No PPE can provide complete protection and inefficient use of PPE can increase the risk of COVID-19 transmission. A mask is a single element of PPE but may not be the most important component as excellent cross infection control behaviours have been shown to decrease transmission more significantly than PPE.

Oral surgery management

Emergency oral surgery is required to manage odontogenic infections. Dental trauma needs to be prioritised, for instances in cases where an avulsed tooth needs to be re-implanted. Post-extraction haemorrhage also requires emergency oral surgery interventions. Dentists need to be vigilant about managing post-operative surgical complications.

Patients will also require assessment and treatments before oncological procedures. Dentists need to prioritise solitary ulceration or swellings on the oral mucosa which have been present for at least two weeks. These are unlikely to reflect local trauma or dental infection. The manifestation of an area of paraesthesia/anaesthesia of the trigeminal region with no history of trauma or infection may also require urgent oral surgical intervention. Dentists must urgently refer suspicious oral lesions, acute lymphadenopathy or a progression of pre-existent lymphadenopathy of the head and neck to their local oral surgeon. Cancer screening patients is critically important due to the inevitable backlog caused by the COVID-19 pandemic.

The cessation of basic dental care during the COVID-19 pandemic along with the advice to manage infections with antibiotics is likely to increase the need for dental extractions as dental services return to their new normal. This will result in more patients being referred for specialist oral surgical services and this demand must be managed in an environment where few patients can be examined. However, patients on ontological pathways, such as those with suspected malignancies, must be prioritised in the normal way with no delays.

Treatment modalities

- Local anaesthesia is safe to continue with
- Inhalation sedation helps patients potentially avoid a general anaesthetic. There remains a lot of uncertainty regarding the safety of inhalation sedation during the COVID-19 recovery. Enhanced PPE and disposable nasal hoods and tubing may be needed as concerns have been raised regarding whether the current sterilisation processes are adequate
- Intravenous sedation is safe to proceed with once safe staffing levels and conscious sedation guidelines are adhered to
- General anaesthesia (GA) is required for many oral surgery procedures. Urgent treatment under GA should be prioritised for patients who have sustained a trauma to their permanent dentition, dentoalveolar or orofacial skeleton in cases where local anaesthetic and intravenous sedation is inappropriate. Patients whose deteriorating dental health is negatively impacting their systemic control of diseases such as diabetes, cardiac conditions, epilepsy or inherited metabolic disorder. The benefits of undertaking oral surgery for these patients may outweigh the risk of bringing patients into hospital environments during the COVID-19 pandemic. Priority must also be given to patients with acute dental infections which are unresponsive to antibiotics and who cannot be managed with local anaesthesia with intravenous sedation. Urgent treatment may be required for patients with learning disabilities such as those with autism where dental pain is exacerbating their behaviour. Biopsies to enable diagnosis of suspected cancerous lesions or pre-radiotherapy extractions must be prioritised. Clinical urgency must be prioritised and airway management remains unchanged in response to the COVID-19 pandemic.

Medically complex patients

Dentists must prioritise patients with an underlying medical condition who are suffering with a dental infection. An unresolved surgical problem may pose greater risks to these medically complex patients. Dentists must also ensure patients with learning disabilities such as autism are referred urgently to avoid adverse behaviours such as self-harm. It is important for dentists to consider the following conditions which often justify urgent oral surgical care:

- Bleeding risk due to chronic renal failure, liver disease, haematological malignancy, recent/current chemotherapy, inherited bleeding disorders such as haemophilia or von Willebrand's disease
- Increased infection risk due to being immunocompromised for example a transplant patient, diabetic patient or a patient taking immunosuppressants, steroids or chemotherapy
- Patients at increased risk of infective endocarditis

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• Patients with communication or behavioural needs such as severe autism where dental disease can negatively impact patients and their families.

Shielded patients

COVID-19 poses a significantly increased risk to certain patients. Careful consideration must be given to the risks and benefits of taking these patients in a dental surgery setting. Vulnerable patients may include the following people:

Organ transplant recipients

• Cancer patients such as those undergoing active chemotherapy, patients undergoing radical radiotherapy for lung cancer, patients with cancer of the blood/bone marrow such as leukaemia, lymphoma or myeloma
• Patients undergoing immunotherapy or antibody treatments for cancer
• Patients having targeted cancer treatments which impact the immune system such as protein kinase inhibitors or parp inhibitors
• Patients who are taking immunosuppressant drugs or those who have had a bone marrow or stem cell transplant in the last year
• Patients with severe respiratory illnesses such as cystic fibrosis, severe asthma and chronic obstructive pulmonary disorder
• Patients at increased risk of infections such as those with severe combined immunodeficiency or homozygous sickle cell disease
• Pregnant women with significant congenital/acquired heart disease
• Patients on immunosuppression therapies at increased risk of infection.

The dental profession must ensure that medically complex patients have their dental needs met as an integrated aspect of their general health. Oral surgical services must be made available in a manner that minimises these patients need for additional visits to a dental environment.

Safeguarding

As dentists, our responsibilities to safeguard patients continues throughout this pandemic and in its aftermath. It is important to acknowledge the reality that some of our patients will have been exposed to increased risks of domestic abuse. Similarly, many patients may have experienced a deterioration in their mental health as a result of the restrictions that the COVID-19 pandemic has placed on their daily life. Consideration should be given to prioritising dental examination for these patients.

Preparation of patients before contact

• Ask patients whether they have a history of a cough, fever, loss of taste/smell or self-isolation. Non-urgent treatment for patients displaying COVID-19 symptoms should be postponed
• Patients should not have a person accompanying them unless an escort is necessary for support
• Digital platforms should be utilised for history taking before attendance to reduce face-to-face time in the dental surgery.

At-home self-care

Patients should be encouraged to optimise their oral self-care to reduce the likelihood of developing new disease. Key preventative oral hygiene measures should be reinforced.

Workforce concerns

During the recovery phase, there will workforce issues that may challenge our capabilities in dental care provision for children and young people. Workforce issues include a reduction in the attendance of dental team members due to shielding, self-isolating, child-care demands or mental health issues. There may also be the need to alter working patterns such as an extension on the working day to compensate for less 'efficient' use of clinic time. The COVID-19 pandemic has also negatively impacted the undergraduate and postgraduate clinical training programmes which will have serious long-term implications on the workforce.

Conclusion

An integrated and flexible workforce within primary and secondary care will help ensure our care pathways are streamlined and that dental service provision is as effective as possible. As dentists, we need to adopt a new way of thinking as we work through the considerable backlog of untreated dental disease within the population as a result of the postponement of routine dental services. We need to re-evaluate how services are prioritised and delivered. Relieving pain and managing acute dental infections is the immediate priority. It is important that every patient receives tailored oral health advice in these uncomfortable times to minimise the need for urgent dental treatment.

ABOUT

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