Recommendations for Diagnostic Imaging during COVID-19 pandemic

2020

www.rcseng.ac.uk/dental-faculties/fds/coronavirus/
1. Scope of document

This document provides advice and guidance for the triage, assessment and provision of diagnostic imaging when providing urgent dental care for patients during the COVID-19 pandemic and is intended for use by oral health care professionals working in England.

2. General Principles

The means of managing radiography for patients may vary between primary care settings and secondary care settings and will be dependent on the radiography equipment available in any given healthcare facility. The advice below must therefore be considered for each specific centre and may need to be adapted accordingly.

» Keep radiography as simple as possible to minimise staff-to-patient contact, while providing diagnostic quality radiographs.

» Sectional or full width dental panoramic (DPT/OPG) radiography should be considered as the first line of imaging, and adequate for managing patients in these acute settings, where only emergency treatment is being provided. Sectional panoramic imaging is appropriate for localised dental pain and/or swelling around one – two teeth or sextant, and full field dental panoramic imaging indicated for multiple dental problems or for patients who may possibly to be treated under GA, if this was available in the urgent care setting.

» Oblique lateral (extraoral) radiographs may be employed where this facility is available.

» Small volume Cone Beam CT (CBCT) may subsequently be considered for complex cases and where available, if panoramic radiography has failed to provide the diagnostic information required. This would be more likely to be the case in the tertiary urgent care setting.

» Where extraoral radiographs are not available careful consideration should be given to the use of intraoral radiographs following an appropriate risk assessment. Particular emphasis should be placed on whether a patient reports a strong gag-reflex or has previously struggled with intraoral radiographs. To avoid irritating the airway and inducing coughing or retching, use of periapical radiographs should be limited, and only where patient’s co-operation and ability to breathe through their nose is good. Occlusal radiographs may be considered as an alternative to periapical radiographs.

» It is advisable to work as a pair, with one operator responsible for positioning of the patient and equipment, while the other operator takes responsibility for pressing the exposure button, operating the computer, and handling the imaging plates or film once unwrapped by the other operator.
3. Infection control of radiographic equipment

a. Panoramic and CBCT Imaging

» It is recommended that all panoramic and CBCT units are barrier wrapped in the regions contacting the patient, and also the control panel.

» The bite peg, if used, should also be covered in a similar way, but its use may be avoided by aligning to the commissure of the lips and asking the patient to place their incisors edge to edge.

» Where local measures involve a COVID-19 positive patient wearing a face mask a panoramic can be taken with the face mask on, using a chin rest instead of a bite peg, and aligning to the canine prominence, or alar line, which can be palpated through the mask and marked with pen on the mask.

» Following the examination, the barrier wrapping should be removed, and the areas wiped down with disinfectant according to local infection control protocols.

b. Intraoral Imaging

» Use dirty and clean zoning for films/sensors and film holders.

» Process imaging films/phosphor plate sensors using a no-touch technique. It is advised that the operator dries the intraoral packet with tissue and then wipes the packet with a suitable disinfectant.

» The gloved operator then tears open the protective outer intraoral packet and the image sensor plate (or packeted film) is dropped onto a clean surface. A second operator can then transfer the sensor/film to the processor.

» Disinfect surfaces of dirty zones following completion of imaging, in keeping with local infection control protocol.

This guidance may be subject to change in light of the changing national guidance.

The development and production of this guideline was led by Dr Paul Nixon, Dr Jackie Brown, Dr John Rout and Dr Bethan Thomas on behalf of the British Society of Dental and Maxillofacial Radiology and the Faculty of Dental Surgery, Royal College of Surgeons of England.