



DMDI NEWS

dental & medical diagnostic imaging

A Centre of Excellence

Newsletter 7 May 2010

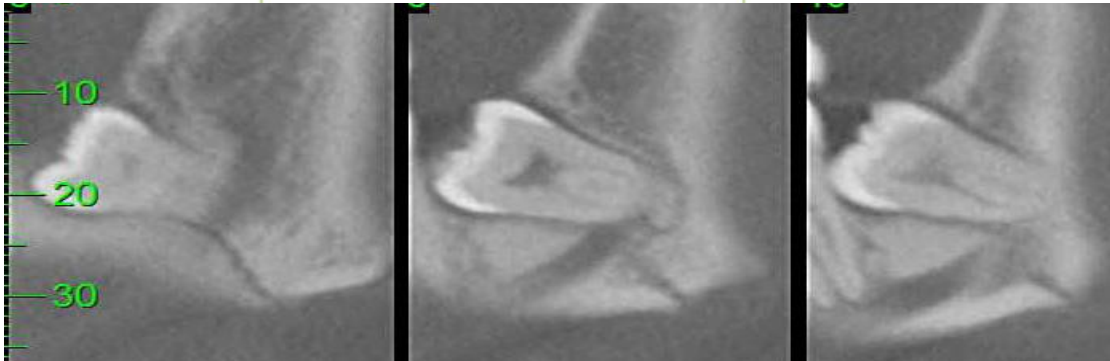
CBCT AND FACIAL TRAUMA

At Dental & Medical Diagnostic Imaging (DMDI) we cannot only provide imaging for planned dentistry care, we also offer Cone Beam CT (CBCT) imaging for both dental and maxillofacial trauma. DMDI can accommodate your patients quickly in an emergency situation, so that a patient can begin their treatment plan quickly and efficiently with the best results available. Your patients will also be given a disc of their CT images to take to their immediate consultation.

Maxillofacial and dental trauma can present a clinical challenge with the regard to their diagnosis, treatment plan and prognosis.¹ Cone Beam CT (CBCT) is an emerging method of imaging for bone or tooth fracture and also visualisation of foreign bodies such as glass.¹

CBCT is becoming the preferred method of imaging for facial trauma providing:

- Short scan times
- Significantly lower radiation dose than a medical CT
- Only marginally higher radiation dose than a plain film x-ray, yet providing detail in 3D
- Patient seated providing extra comfort in a time of great discomfort
- Increase image quality at very fine slice thickness.²



CBCT slice of a Left Side Mandibular fracture

Not only can CBCT aid in investigating minute dental and facial fractures, it is also proving to be the best imaging tool for location of foreign bodies such as glass fragments³. Identification of such fragments can be difficult particularly when they are small in size. Whilst standard plain film x-ray may in some cases be able to identify the presence of a foreign body, it cannot map the location in three dimensions. CBCT allows for such mapping, to provide a precise location of the glass³. This is of great benefit to aid the retrieval of even the smallest of fragments. CBCT can provide thin image slices and is severely less affected by metallic artefacts.⁴

t 03 9889 1771
f 03 9889 1772
e reception@dmdi.com.au
w www.dmdi.com.au
Unit 9 1175 Toorak Road Camberwell Victoria 3124
Mon to Fri 8.30am to 5pm, by appointment



If you require a referral pad you can write to us at referral@dmdi.com.au or simply go to our web page at www.dmdi.com.au and download a form. If you wish to speak with our radiographer, please call 03 9889 1771.
Location - Unit 9 1175 Toorak Road Camberwell Victoria 3124

While these CBCT images are highly beneficial to the medical staff, it also has benefits to the patient. It provides a radically reduced radiation dose to that of a medical CT. This is of particular importance when irradiating such sensitive areas and the head and thyroid.²



Axial and Coronal CBCT slice showing two glass fragments³

References:


1. Shintaku, WH et al (2009). *Applications of cone-beam CT in Fractures of the maxillofacial complex*. Dental Traumatol, Vol 25 (4), 358-366.
2. Scarfe, WC & Farman, A (2007). *Voxel Vision Using Maxillo facial CBCT*. Retrieved www.aadmrt.com/currents
3. Sadiq, Z et al (2009). *Use of cone beam computed tomography in the management of glass injuries to the face*. Br J Oral Maxillofac Surg. Doi:10.1016
4. Von See, C et al (2009). *Forensic Imaging of Projectiles using Cone-Beam CT*. Forensic Sci Int. Vol 190 (1-3), 38-41.

The image quality of the Morita Accuitomo CBCT used by DMDI offers you the referrer accuracy and imagery that is of the highest quality in the market place in Australia today.

DMDI is a centre of excellence.


This Month’s advertising is by Andrei Locke, if you would also like to utilise this space please contact Danielle at DMDI on 9889 1771

The Perio.Group
SPECIALIST PERIODONTICS & DENTAL IMPLANTS



Dr Andrei Locke | PERIODONTIST
BDS(Hons), GDipCD, MDS(Melb), FRACDS(Perio), FPPA

Dr Andrei Locke is excited to announce the recent opening of his Specialist Periodontic practice in Glen Iris. He is pleased to offer a full range of periodontal and surgical implant treatment



PHONE: (03) 9889 7899 FAX: (03) 9889 7833 ADDRESS: 104 Glen Iris Rd, Glen Iris VIC 3146
EMAIL: admin@theperlogroup.com.au WEB: theperlogroup.com.au