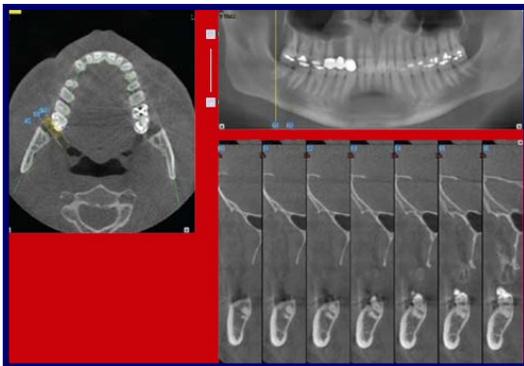
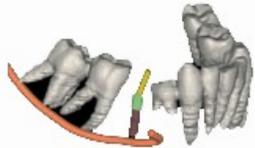
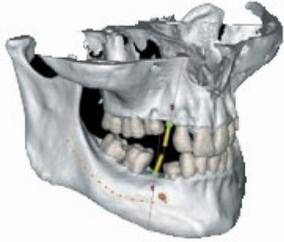


Cone Beam Scan



For more information or to make
an appointment, contact us:

Tel: 041-581 2660

Office located at the Eye & Laser Institute

205 Cape Rd, Mill Park

Port Elizabeth

Office hours: 8:00 am to 17:00 pm, Monday to Friday.

Please note that we are a cash practise.

Directions to the 3D Dental Imaging Centre:
situated at the Eye & Laser Institute



3D Dental Imaging Centre

3D Dental Imaging Centre

Cone Beam Volumetric Imaging



The new standard of
excellence in dentistry

Patient Information

Benefits of Cone Beam Volumetric Imaging

CBVI distinguish between many types of tissues including bone, teeth, nerves and soft tissue. It is non-invasive, identify infections and tumours, eliminate exploratory surgery and is a cost-effective and safe method for providing diagnoses and a wide range of clinical applications from a single scan:

- Visualise internal anatomy that cannot be seen on normal x-rays
- Plan and assess risks of surgical treatment
- Analyse 3D orientation of vital structures such as nerves, teeth, roots, sinuses, etc.
- Implant planning and placement through the use of templates manufactured on 3D models
- Orthodontic treatment planning from 3D images
- Temporomandibular joint (TMJ) analysis
- Identify oral pathology such as infections, cysts and tumours
- 3D Visualisation of impacted teeth
- Planning prior to wisdom teeth removal
- Ear, sinus and airway diagnostics
- Less radiation & Precise 1:1 Scale Imaging

Risks

As with all types of x-rays there is a slight risk to the patient, however it provides the benefit of supplying useful information to assist in making diagnoses and facilitating treatment. When you are referred for a Cone Beam scan, your doctor has determined that the benefits outweigh the risks.

Practitioner Information

- Experts in radiography, oral surgery, dental implant placement and medico-legal issues are convinced that CBVI will become the standard of care and that this technology must be embraced if excellence is a priority
- Provides unlimited images from a single, low dose cone beam scan including panoramic, cephalometric, axial, sagittal, coronal, cross-sectional and three dimensional images
- Serves as an excellent tool to diagnose and plan treatment of complicated cases
- Assessment of airways, paranasal sinuses, incisal canal, path of inferior alveolar nerve (IAN), impacted teeth, cortical bone and tongue posture. Virtual 3D study models can be created from the data
- Raw data indefinitely saved and available for comparison with a post-operative image
- Built-in conversion to Dicom 3 makes it compatible with all major third party software systems e.g. Simplant, Procera, Dolphin etc.
- Implant planning using built-in tools for locating the IAN canal and measuring bone height, width and density or by applying third-party software
- Otolaryngology diagnostics, including ear, mastoid region, sinus and airway imaging
- Maxillo-facial diagnostics of 3rd molars, TMJ, mandibular canal and orthognathics
- Periodontal and endodontic evaluation of root and bone anatomy

Features of the Cone Beam Scanner

- The Cone Beam Scanner requires the patient to lie on a table, which is adjusted to position the head within the scanning area to allow 360° rotation of the cone beam X-ray. The flat panel detector records 360 multi-dimensional images in 36 seconds
- This position ensures the most stable image capturing, as it restricts movement thus avoiding the necessity to re-scan
- A “pulsed” system of x-rays provides exposure of less than six seconds during the scan
- The images undergo reconstruction within five minutes to create a 3D image of the patient’s anatomical structures
- The Cone Beam Scanner is the only system that automatically adjusts the radiation dosage based on patient size, determined at the time of positioning. A small child receives up to 40% less radiation than an adult
- The Cone Beam Scanner produces up to 50 times less radiation than conventional medical CT scans of the same region

