Benefits of Dental CBCT scan at Butler Medical Imaging. (08) 9544 3999

In the world of dental radiography, the evolution of technology has transformed the way we diagnose and treat patients. For decades, two-dimensional (2D) radiographs like periapical and panoramic X-rays have been the go-to methods for dental imaging. However, these traditional techniques have their limitations, such as low-definition images, distortion, and superimposition, which can sometimes lead to incorrect diagnoses. In situations that require greater clarity and detail, patients were often referred to medical (spiral) CT scans. While these [CT scans](https://butlerimaging.com.au/dental-cbct/) provided more information, they also came with their own set of challenges, including higher radiation exposure and longer procedure times.

**What is a Dental Dental CBCT scan ?**

A Dental Dental CBCT scan is a three-dimensional (3D) radiograph that provides detailed images of the teeth, bones, and soft tissues in a single scan. The technology behind CBCT is similar to the computed axial tomography (CAT) scans used in the medical field, but with some key differences. The most notable difference is that CBCT uses a cone-shaped X-ray beam, which focuses on a smaller area, resulting in significantly less radiation exposure compared to traditional CT scans. This targeted approach minimizes distortion and provides highly accurate measurements of bone density, height, and width, making it an invaluable tool in dental imaging.

**When Do You Need a Dental CBCT scan ?**

A Dental CBCT scan may be recommended by your dentist in several situations where traditional 2D radiographs fall short. Here are some common scenarios where a Dental CBCT scan is beneficial:

1. **Dental Implants**: For patients considering dental implants, a [Dental CBCT](https://butlerimaging.com.au/dental-cbct/) scan is essential for precise planning and placement. The 3D images provide detailed information about the bone structure, allowing for accurate measurements and ensuring the implant is positioned correctly for optimal results.
2. **Root Canal Treatment**: In cases where root canals are complex or hard to visualize, a Dental CBCT scan offers a clear view of the root canals, helping to identify any issues that may not be visible on a standard X-ray.
3. **Temporomandibular Joint (TMJ) Disorders**: If you are experiencing pain or dysfunction in your jaw joint, a Dental CBCT scan can provide detailed images of the temporomandibular joint, aiding in the diagnosis and treatment of TMJ-related problems.
4. **Impacted Teeth**: When dealing with impacted teeth, especially wisdom teeth, a Dental CBCT scan can reveal the exact position of the tooth in relation to neighboring structures, such as the mandibular nerve and maxillary sinus. This information is crucial for planning safe and effective extractions.
5. **Orthodontic Treatment**: For patients undergoing [orthodontic](https://butlerimaging.com.au/dental-cbct/) treatment, a Dental CBCT scan allows for a comprehensive evaluation of the facial structures and teeth, helping to develop a more effective treatment plan.

**Benefits of Dental CBCT scan s Over 2D Radiographs**

The advantages of Dental CBCT scan s over traditional 2D radiographs are numerous, and they have become a game-changer in dental diagnostics and treatment planning. Here are some of the key benefits:

1. **High-Definition Images**: Dental CBCT scan s produce high-resolution images with exceptional detail, allowing for a more accurate diagnosis.
2. **Multidimensional Assessment**: Unlike 2D radiographs, which only provide flat images, Dental CBCT scan s generate multiple images in various planes. This multidimensional view enables a more comprehensive assessment of the area being examined.
3. **Improved Diagnosis and Treatment Planning**: The clarity and detail provided by Dental CBCT scan s allow for more accurate diagnosis and treatment planning, leading to better patient outcomes.
4. **Guided Surgeries**: [Dental CBCT](https://butlerimaging.com.au/dental-cbct/) scan s are invaluable in guided surgeries, where precise measurements and detailed images are required to plan and execute surgical procedures with minimal risk.

**Advantages of Dental CBCT scan s Over CT Scans**

While both CBCT and traditional CT scans are used for imaging, CBCT offers several advantages, particularly in the field of dentistry:

1. **Reduced Radiation Exposure**: One of the most significant benefits of Dental CBCT scan s is that they expose patients to up to 90% less radiation compared to traditional CT scans. This is particularly important for patients who require multiple scans over time.
2. **Quick Procedure**: A typical Dental CBCT scan takes only 30 seconds to a minute to complete, compared to the one-hour procedure time often required for a traditional CT scan. This makes the process more convenient and less stressful for patients.
3. **Comfortable Experience**: Unlike traditional [CT](https://butlerimaging.com.au/appointment/) scans, which can cause discomfort due to claustrophobia or loud noise, Dental CBCT scan s are much quieter and more patient-friendly.

**Why Choose Butler Medical Imaging?**

We are local and a privately-owned medical clinics that offers the highest quality medical and Imaging Services in the [Butler](https://butlerimaging.com.au/appointment/) Medical Imaging region. We are the leaders in Bulk Billing with the real benefit of no ‘Out of Pocket’ expenses for you.

**Your Next Step**

Please ensure that you have your Medicare card and referral with you and pop into our location for your consultation. If you have any questions at all, please feel free to contact us at [+61 8 9544 3999](https://butlerimaging.com.au/appointment/) as we are here to help.