Cone Beam CT for Root Canal and Endodontic Assessment

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A focused CBCT may help answer complex root-canal questions when examination and two-dimensional X-rays are insufficient.

Why root-canal anatomy can be difficult to assess

Teeth can have multiple roots, curved canals and small anatomical variations that overlap on a two-dimensional X-ray. CBCT can display the tooth and surrounding bone in multiple planes and may clarify selected complex cases.

When CBCT may be considered

- Suspected additional or untreated canals.

- Persistent symptoms after previous root-canal treatment.
- Possible root fracture or perforation.
- Complex root shape or resorption.
- A lesion that cannot be localised confidently on standard images.
- Planning selected endodontic surgery.

A focused examination is usually preferred

Endodontic questions often require a small field of view centred on one or several teeth. This can provide high spatial detail while limiting radiation to the required area. CBCT should not be used routinely for uncomplicated root-canal treatment.

Standard dental X-rays remain important first-line imaging; see Dental X-Ray at MBR Health.

Important limitations

Metal fillings, crowns, posts and implants can create streak artefact that obscures fine detail. Very small fractures may remain difficult to see. CBCT findings must be interpreted with symptoms, vitality testing, periodontal probing and clinical examination.

Frequently Asked Questions

Can CBCT confirm every cracked tooth?

No. Some cracks are below the resolution of the scan or hidden by metal artefact. A normal CBCT does not completely exclude a crack.

Why not use CBCT for every root canal?

Routine two-dimensional imaging is often sufficient and uses less radiation. CBCT is most useful when a specific unresolved question may change treatment.

Can CBCT tell whether a tooth can be saved?

It can provide important anatomical information, but prognosis also depends on symptoms, restorability, periodontal support and the clinical examination.

Related Patient Guides

See the full MBR Health Patient Guides library for simple information about imaging, preparation, safety and results.

- PG5001 Cone Beam CT: What to Expect Before, During and After Your Scan
- PG5002 Cone Beam CT vs OPG and Standard Dental X-Rays
- PG5003 Cone Beam CT Radiation Dose and Safety
- PG5004 Cone Beam CT for Dental Implant Planning
- PG5005 Cone Beam CT for Wisdom Teeth and Oral Surgery
- PG5007 Cone Beam CT for Orthodontics and Impacted Teeth
- PG5008 Cone Beam CT for the Jaw Joint and Facial Skeleton
- PG5009 Sinuses, Airways and Incidental Findings on Dental CBCT
- PG5010 What Cone Beam CT Can and Cannot Show

Related MBR Health services: Dental X-Ray • X-ray & Dental Imaging

More FAQs: For other common imaging and appointment questions, visit the MBR Health FAQs page.

> **Important:** A CBCT result should not be interpreted in isolation. Root-canal diagnosis and prognosis require correlation with dental examination and other tests.

PATIENT GUIDE • PG5006 | Patient information: root canal CBCT Gold Coast

Searching for high-resolution root canal CBCT on the Gold Coast?

For complex endodontic problems, patients may search for the most accurate dental scan or an expert radiology opinion. A focused cone beam CT can provide detailed 3D assessment of roots and surrounding bone, but accuracy still depends on the indication, field of view, artefact and interpretation. MBR Health provides specialist radiologist-reported CBCT on the Gold Coast for patients locally and those travelling from Brisbane.

Explore: Dental X-Ray • X-ray & Dental Imaging

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