



Dentist

Dental X-Rays: Safe tools for healthy smiles

Dental X-rays are a vital part of oral healthcare. They allow us as dentists to detect what may not be possible with just our eyes. This helps us to diagnose problems early and guide treatment. While many people may worry about radiation exposure, dental X-rays are generally safe, quick, and extremely useful in maintaining healthy teeth and gums.

Types

Periapical X-rays: These show the entire tooth from crown to root. They are useful for spotting abscesses, cysts, or root problems.

Bitewing X-rays: This is taken with the patient biting down on a sensor holder. They reveal cavities between teeth and bone loss from gum disease.

Orthopantomogram (OPG): This provides a panoramic view of the jaws and teeth and it is used to give a general view of all the teeth and other oral structures.

3D Cone Beam CT scans: Provide detailed three-dimensional images. Essential for planning implants, complex surgeries, or orthodontics.

Other specialised types include occlusal X-rays, which capture the floor or roof of the mouth to detect extra teeth or jaw abnormalities, and cephalometric X-rays, which show the side profile of the head, commonly used in orthodontics.

Why dentists use them

X-rays help detect cavities, infections, bone loss, impacted teeth, and developmental issues. They are crucial in planning treatments such as root canals, braces, or implants. Without them, many hidden problems would remain unnoticed until they become severe.

Despite their benefits, X-rays are avoided in certain cases. Pregnant women, for example, are generally advised not to undergo dental X-rays unless necessary.

In such situations, dentists rely on alternative diagnostic methods or postpone imaging until after pregnancy.

Safety

Radiation is part of everyday life. The sun, household appliances, and even certain foods expose us to small amounts daily.

Dental X-rays use very low doses, often less than what one might receive from a short aeroplane flight or a few hours in the sun.

Modern digital X-rays further reduce exposure compared to older film-based methods. Dentists also use protective lead aprons and thyroid collars to shield patients during the procedure.

Dental X-rays are safe, effective, and indispensable in oral healthcare. They allow dentists to diagnose problems early, plan treatments accurately, and protect long-term oral health.

With radiation exposure comparable to everyday sources like sunlight, patients can feel confident that dental X-rays are a valuable ally in keeping their smiles healthy.