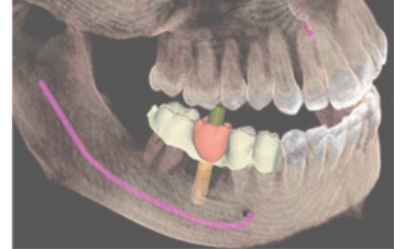


## CBCT SCANS

We have recommended that you have a CBCT scan. The following information tells you a little about this technology and what is involved.



### What is CBCT?

Cone Beam Computed Tomography (CBCT) is a type of X-ray equipment used to provide information when regular X-rays are not sufficient. It produces detailed three-dimensional (3D) images of your teeth, nerve pathways, bone and some soft tissues in a single scan. It is not used routinely because the radiation exposure is more than regular 2D dental x-rays.

CBCT uses an X-Ray beam in the shape of a cone, which moves around the head in a complete 360-degree rotation. Multiple 2D high-resolution images are recorded, which when digitally combined generate the 3D image. The image taken can be programmed to the specific area of interest.

CBCT does not provide the full diagnostic information like a hospital CT scan. However, CBCT has the advantage of using significantly less radiation and produces similar high quality images for the purposes required.

Please let us know if there is a possibility you might be pregnant.

### Why do I need a CBCT scan?

Images obtained with CBCT allow for more precise treatment planning.

Arden House is able to carry out these scans to enable accurate surgical planning in more complex cases, such as implant treatment and tooth removal.

We use 3D CBCT images to provide full anatomical information in order to accurately advise you in making decisions about achieving your treatment goals. 3D information is particularly important when implants may need to be placed near vital structures or when a tooth to be removed sits near to a nerve or is an unusual shape or in an unusual position, for example an impacted wisdom tooth.

When implant planning, we can overlay the final design / position of the teeth and accurately plan the number and position of implants needed and if additional grafting may be required. A surgical guide can then be made using this information to place the implants in the exact same position as planned. This digital technique may help reduce the need for additional grafting and more extensive surgery, whilst offering predictability and reassurance.

Other examples of when a CBCT scan may be useful are in orthodontic planning, surgical planning to remove impacted teeth and diagnosing jaw disorders.



## How is the scan carried out?

The machine used is similar to that dentists frequently use to create the more common 2D full arch scan. The process involves you being able to stand or sit still while the X-Ray source and detector revolve around you. The machine is programmed so the area of interest is centered in the beam.

Having a CBCT is pain free. The machine will not touch you and you can return to your normal daily activities immediately following the scan.

Metal objects including jewellery, glasses, hair clips and dentures may affect the CBCT image and so you will be asked to remove these for the duration of the scan

## Benefits V Risks

### BENEFITS

- CBCT reduces scatter radiation, resulting in better image quality.
- A single scan produces a wide variety of views and angles that can be manipulated to provide a more complete and detailed evaluation.
- CBCT scans provide more information than conventional 2D dental X-rays, allowing for more precise treatment planning.
- CBCT scanning is painless, noninvasive and accurate.
- No radiation remains in a your body after a CBCT examination.
- CBCT scans should have no immediate side effects.

### RISKS

- Excessive exposure to radiation can cause cancer. However, the benefits of medical imaging far outweigh this risk.
- Due to the known risks of radiation to the unborn child, where possible CBCT imaging should be delayed until after the birth of the child.
- Children are more sensitive to radiation, and should only have a CBCT if it is essential and should not have repeated radiological exams unless absolutely necessary.

## Booking your scan

Arden House Dental and Cosmetic Clinic have their own CBCT machine so your scan will take place in familiar surroundings.

The scan itself typically takes between 20 to 40 seconds but we ask you set aside approximately 30minutes for your appointment.

We will arrange to see you again following your scan, where we will show you the images, explain the results and of course discuss what this means regarding your treatment options.

