MRI scan

An MRI (magnetic resonance imaging) scan shows fine detail of soft tissue, tendons, nerves and muscles, and is used for images of the brain and musculoskeletal system. The MRI scanner can build up a view of the whole body, and as no radiation is involved, it is the preferred way to scan children. It produces a powerful magnetic field, causing the body's cells to give off electrical signals, which a computer turns into images.

Patients lie on a couch that slides into the scanner (a short tunnel surrounded by a large circular magnet) for pictures to be taken. A computer is used to operate the scanner. It is important that no metal objects are inside you, such as pacemakers or artificial heart valves, artificial limbs or joints, cochlear implants, or various screws, plates or staples from previous surgery. You will be asked about this before the scan, and also whether your job involves working with metal. During the scan, you may have to remain still for up to an hour, but most scans take only 20-30 minutes. Although there are no known side effects for pregnant women, they are not scanned unless absolutely necessary. The results of these scans are not available as quickly as standard x-rays, so you may have to wait for about two weeks before your doctor knows the results.

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Please ask if you need this information in another language or format.

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NHS
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X-ray and scanning procedures at the West Berkshire Community Hospital (WBCH)

Information for patients

Compassionate | Aspirational | Resourceful | Excellent

This leaflet outlines the X-ray and scanning services at the West Berkshire Community Hospital.

The X-ray Department at WBCH

No appointment is needed for standard x-rays, Monday to Friday 8.30am to 4pm. Please bring your referral card or form with you. For scans and some special x-rays, an appointment is necessary. Please bring your appointment letter with you when you come for your x-ray.

Standard x-ray

Standard x-rays are simple 2-dimensional (2D) images of dense areas of the body such as the chest, spine and abdomen. They can show major changes in tissues and organs, and are particularly useful to look at bones to show joint problems and bone fractures, and to check on bone healing. They are also used for teeth and jaw images.

Modern x-ray departments are digitalised, and the 2-D digital images are stored and viewed on computers.

Women who are or may be pregnant should avoid having x-rays or scans, especially involving the pelvis or abdomen, particularly in the first three months.

X-rays are completely painless, and you cannot see or feel them, and a simple x-ray may take only a few minutes.

Mammogram

Mammograms can detect early breast cancers that cannot be felt by physical examination. The NHS Breast Screening Programme offers women aged over 50 years of age a mammogram every three years until the age of 70. You will be asked to undress to the waist and stand in front of a mammogram machine. Each breast is positioned in turn between two plates so that it is compressed and flattened, and a detailed picture is displayed on a digital screen. Although not painful, having a mammogram can be uncomfortable.

CT scan

The CT or CAT (computed axial tomography) scan is used for detailed pictures of any part of the body, from soft tissues to organs and bones. It gives a more precise image than an x-ray, and can be used on the brain to look at stroke damage. The CT scan takes a series of image ‘slices’ at different angles, and unlike a flat x-ray which gives a 2-D image, a CT scanner can be moved up and down the body to produce an in-depth cross-sectional image.

Depending upon which part of the body is being scanned, a dye (called a ‘contrast medium’) may be used to help get clearer pictures. For example, before a scan of the abdomen you may be given a drink containing barium, which will show up on the x-rays as it moves through the gut.

Ultrasound scan

This is for examining soft tissues, internal organs and developing foetuses.

A pregnancy scan can pick up around 70% of serious prenatal abnormalities, such as spina bifida. It can also find changes in the soft organs of the body, such as cysts or gallstones, by using high-frequency soundwaves to form a picture of the internal organs or of an unborn baby. Acoustic gel is applied and a probe attached to the machine, is moved across the area being examined.