

42 Therapies

A Radiotherapy and chemotherapy

Radiotherapy is the use of radiation in controlled doses to treat cancers. It works by damaging the DNA of malignant cells. Radiotherapy may be used:

- as **curative** treatment, for example to shrink tumours
- as **adjuvant** treatment, alongside or following **chemotherapy** – treatment with anti-cancer drugs
- in lower doses as **palliative** treatment to reduce pain and other symptoms of cancer or disease, but not as a cure.

A **radiologist** determines the dose and the exact target for the radiation beams. Dosage is measured in **grays (Gy)**. A daily dose is a **fraction**. Radiotherapy can also be delivered internally by radioactive **implants** such as needles, or by liquids such as strontium for some bone cancers.

B A day in the life of a physiotherapist

Sam is a hospital **physiotherapist**. She works mainly with patients who have conditions or injuries affecting the lower extremities such as fractures, torn ligaments, and cartilage tears. Most of her patients are **referrals** from other departments in her hospital. She also works with patients in **rehabilitation** following orthopaedic surgery. Some are young people with sports injuries, others are elderly people who have had **hip replacements**. Among her therapies are **manipulation**, **massage**, and exercise to keep the joints mobile and to strengthen muscles. **Rehabilitating** some patients means helping them to walk again using **crutches** or **Zimmer frames**.



Crutches



A Zimmer frame

C Cognitive Behavioural Therapy

Cognitive Behavioural Therapy (CBT) is one of the 'talking therapies' for mental health conditions. It aims to eliminate negative thoughts and change behaviour in response to these thoughts. It can help with anxiety, panic attacks, depressive disorders, **post-traumatic stress disorder** and **chronic fatigue**. Therapy can be provided in **face-to-face sessions** with a **therapist**, but delivery by computer can also be effective. It is more effective than **counselling** for some and can provide long-term protection against **relapse**, a return of symptoms after improvement. However, patients must be committed to solving their problems and prepared to work on them between sessions.

42.1 Name the therapy being described. The same therapy may be described more than once. Look at A, B and C opposite to help you.

- 1 Treatment with drugs toxic to cancer
- 2 Treatment of cancer by radiation
- 3 May include massage
- 4 Aims to eliminate negative thoughts
- 5 Can involve helping people to walk again
- 6 Can help with panic attacks

42.2 Complete the sentences. Look at A opposite to help you.

- 1 treatment is given in larger doses than palliative treatment.
- 2 Radiotherapy can be used alongside other treatments as therapy.
- 3 treatment is treatment which helps relieve the symptoms of a condition but does not cure it.
- 4 Radioactive are wires or needles placed into the area to be treated.
- 5 A typical for an adult is 1.8 to 2 Gy.

42.3 Complete the text describing a typical working day for Sam. Look at B opposite to help you.

Work begins around 8.00 am. I check for new (1) on the computer and prepare for my morning appointments. Between 9.00 and 12.00 I see new patients around the hospital. I carry out assessments on them and decide what the appropriate form of (2) is. I work with broken limbs, joint (3) and ligament repairs. I deal with A&E patients as well as patients referred to me by their GPs or specialists.



After lunch I see regular patients. Their therapy includes exercises to increase range of motion and to strengthen muscles.

What do I like about being a (4) ? Getting people back to normal. (5) people so they can get on with their lives after an injury or an operation.

Over to you

Talk about two contrasting therapies you have experienced, and the advantages and disadvantages of each.