

Case Study—Basal Cell Carcinoma

History

An 84 year old male patient was referred by Dermatologists after a peripheral biopsy confirmed the diagnosis of a Basal Cell Carcinoma on the gentleman's back.

Pathology

A BCC is a malignant tumour which arises from the basal cells within the Stratum Basale layer of the epidermis. They most commonly occur as a result of over exposure to UV radiation and account for the majority of skin cancers arising globally.

Unlike other forms of skin cancer BCC's do not have the capability to spread to other areas of the body but can be very locally destructive. They are fairly radiosensitive and therefore respond well to Superficial Radiotherapy.

Treatment

The area was marked up for treatment using a 5mm margin around the visible edge of the tumour.

The standard prescription for BCC's was modified from 37.5 Gy in 5 daily fractions due to the relatively poor blood supply on the lower back.

Radiotherapy Prescription

40 Gy applied dose in 10 daily fractions (4 Gy per fraction)

HVL - 3.39mm Al (100kV)

Field size - 4.0 x 4.5 cm ellipse.

Beam Modification - Lead cut out to define the field size, 5 cm circle applicator.



The patient was treated using an Xstrahl X-Ray Therapy System at Colchester Hospital University NHS Trust.