

Biopsy

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A biopsy is performed only when local staging investigations have been completed. Because removal of the biopsy track is an important principle in the treatment of sarcomas, and specialist pathology is required, biopsies should be performed either in, or after consultation with, the specialist centre where the definitive surgical procedure will be performed. Image-guided biopsy has a higher diagnostic accuracy because areas of radiological concern can be targeted. If image-guided biopsy is performed, close discussion between radiologist and surgeon is required to ensure an appropriate biopsy route is used (Figures 42.26 and 42.27). Summary box 42.10 Biopsy

Biopsies for bone tumours are usually taken using a Jamshidi or other hollow needle (Figure 42.28), while Trucut needles are preferred for soft-tissue tumours. Although most biopsies are performed with a needle, some times an open biopsy is required, which should be performed according to the following principles.

- A tourniquet can be used; but exsanguination by compression should be avoided as this may disseminate the tumour.
- En bloc is French for 'in a block'. Use longitudinal incisions that are part of an extensile approach.
- Do not cross anatomical compartments or contaminate critical anatomical structures (e.g. nerves or blood vessels).
- Use a biopsy track that can be excised at the time of definitive surgery.
- Ensure specimens are sent for microbiology as well as histopathology.
- Some specimens should be sent fresh to the laboratory for genetic studies.

Figure 42.26 Poorly placed biopsies can make subsequent surgical excision of the track difficult or not possible. Figure 42.27 En bloc excised tumour and biopsy track. Only biopsy once local staging is completed. Biopsy should be performed at, or after discussion with, the specialist centre. Image-guided biopsy is more reliable. The biopsy track should be excised at definitive surgery. Jamshidi needles for bone; Trucut needles for soft tissues. Figure 42.28 Bone biopsy instruments.

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