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Original

THE VALUE OF PERCUTANEOUS NEEDLE BIOPSY IN THE DIAGNOSIS OF LYTIC LESIONS OF THE SPINE

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The aim of this paper is to evaluate the value of percutaneous needle biopsy in the diagnosis of lytic lesions in the spine.

Over a five-year period, 47 percutaneous needle biopsies were performed on 45 patients for lytic lesions shown by plain radiography in one or more vertebrae. There were 24 lesions in the dorsal, 19 in the lumbar and 4 in the cervical spine. A variety of pathological conditions were found which included tuberculosis, brucellosis, tumour metastasis, myeloma and non-specific infections. Of the 47 biopsies, there were 39 positive results, 6 unreliable and 2 were negative where no pathology was found. The reliability of the biopsy was assessed either by further specimens taken during the operation for treatment of the lesion or by the result of the treatment during the follow-up period.

The accuracy of diagnosis in the present study was found to be 83%. No major complications were encountered in this series.

The vertebral bodies are frequently the site of many pathologically lesions. A definitive diagnosis is often difficult to establish on the basis of clinical features, laboratory and radiological investigations.

In 1935 Robertson and Ball1 devised a technique of vertebral needle biopsy which has been refined by many other workers^{2,3}. In 1954, Ackerman4 performed the first vertebral trephine biopsy and in 1963 published the first important series of percutaneous trephine biopsy with 46 cases involving vertebrae from T3 to T10⁵.