CHONDROMYXOID FIBROMA OF BONE

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This is an uncommon lesion of bone: only thirty seven cases have been reported. Of these cases only one, the most recent one, has been reported in British literature (Hutchinson & Park, 1960). No case has previously been reported from South-East Asia.

The pathological entity of chondro-myxoid fibroma of bone was first named by Jaffe & Lichtenstein (1948): more recent accounts have been given by Lichtenstein (1952), Dahlin (1956) and Jaffe (1958).

The outstanding features of this lesion can be summarised as follows:—

1. **Sex incidence:** Equally distributed between male and female.
2. **Age group:** The majority of cases have occurred in the second and third decades.
3. **Site of lesions:** Almost all lesions have occurred in the lower limb; the commonest site being the upper end of the tibia which has been involved in almost half the cases.
4. **Pain:** Intermittent pain, seldom severe, has been the most frequent presenting symptom.
5. **Radiology:** A roundish or oval area of rarefaction is seen. Some degree of trabeculation across the area is common, as is also the presence of a surrounding zone of increased bone density. The lesion is situated at one end of the bone and does not extend the full width of the shaft.

CASE HISTORY

A male Indian resident in Singapore, aged 21 years, attended the outpatient department for the first time in March 1960. He complained of a painless swelling of the right ankle: this had been present for about three months. There was no significant history of trauma or illness.

Examination

A distinct swelling of the lower end of the right tibia was present. Palpation revealed that the swelling was due to enlargement of the bone. Movement at the ankle joint was equal to that of the left ankle, and was painless.

Radiology

This showed a translucent lesion measuring 7 x 4 cms., occupying the full depth of the lateral portion of the lower end of the tibia. The lesion did not encroach on the epiphyseal area of the tibia but had expanded laterally and indented the lower end of the shaft of the fibula. The translucent area was surrounded by a well defined rim of dense bone. The area of osteoporosis appeared not to be traversed by trabeculae (Fig. 1).

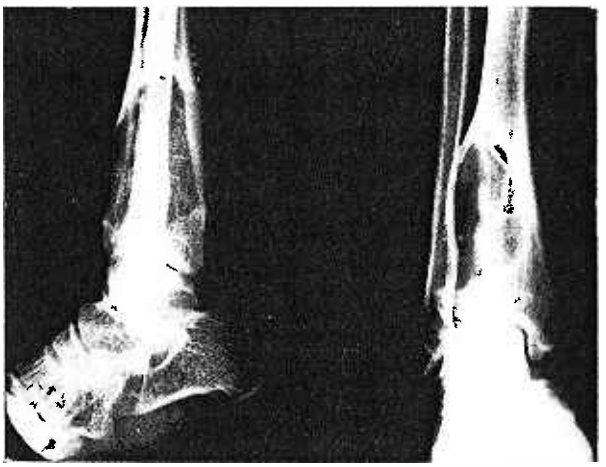

Fig. 1. Shows the lesion before operation.

Biopsy

On 4.3.60 biopsy was undertaken: general anaesthesia was given and a tourniquet used. The lesion was approached from the anterior aspect.

The cortex covering the lesion was found to be thin but hard, it appeared to be whiter than the cortex proximal to the lesion. The periosteum was easy to strip from the bone. The lesion was filled with a greyish-white jelly like material. There was a break in the continuity of the bony wall of the lesion in the posterior and superior part of the cavity which was about 3 mm. wide but seemed to be covered by periosteum.

The cavity was carefully evacuated: no graft was inserted.

Pathological report

There were several whitish nodules, diameter 1 cm. The cut surface was glistening and whitish: characteristic of a chondro-myxoid fibroma. It was composed of pseudo-lobulated areas of fibro-

myxomatous tissue the periphery of which was more cellular than the centre. Most of the cells were spindle shaped, while triangular shaped and comma like forms with cytoplasmic processes were present. There were plump cells with hyperchromatic nuclei. An occasional area simulating the chondroid area with cells lying in lacunae were present.

Progress

The post operative period was uneventful and the patient was discharged from hospital four days after biopsy.

Six months later the patient complained of pain over the anterior aspect of the lower end of the right tibia: a nodule gradually developed in the line of extensor hallucis longus tendon. On 10.1.61 the nodule was explored and found to be attached to the tendon and there was some thickening of the extensor retinaculum.

Biopsy report

'The picture is entirely dissimilar to that seen after the previous biopsy and is one of chronic inflammatory change'.

The patient has had no further complaint.

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