52. INTRAOSSEOUS AND PERIOSTEAL MUCOUS CYST

(ganglion cyst)

This lesion is a mucous cyst (ganglion) primarily originating within the bone or periosteum but otherwise identical to ganglions of the soft tissues (frequently occurring in the joint capsules, tendon sheaths, tendons, lateral meniscus). We exclude from this definition those cysts originating in the soft tissues and secondarily eroding into the adjacent bone.

The intraosseous ganglion is uncommon, prefers the male sex and adult age.

The cyst localizes in proximity to a joint surface: the medial malleolus is a typical and common site; other localizations are around the hip, knee, shoulder, elbow, wrist, and in a carpal or tarsal bone. Exceptionally, the cyst is bilateral and symmetrical (fig. 52-3).

The periosteal ganglion is very rare and usually occurs in the tibial shaft.

The cyst may be asymptomatic, or cause discomfort and moderate pain. Swelling may occur in rare cases, when the cortex is expanded and in the periosteal locations.

Roentgenograms show a lucent roundish defect of moderate size, excentrically located. The cyst has smooth wedges defined by a thin rind of bone sclerosis, sometimes lobulated or

Fig. 52-1. Sex, age and localization in 70 cases of intra-osseous and periosteal ganglion cyst (71 localizations: 1 case was bilateral in the medial malleolus).
slightly septated due to parietal bone ridges. The cyst is usually separated from the joint surface by a layer of bone, and the joint surface and space appear to be normal. The cortex is usually thinned and may be slightly expanded.

In the periosteal cyst, the cortex may be normal, or slightly saucerized. A very thin shell of periosteal reactive bone may surround the cyst and a few thin bony septa perpendicular to the cortex may cloister the cavity (fig. 52-8).

Fig. 52-2. Intra-osseous ganglion cyst, in a male aged 58 years. The swelling was present for 13 years. The X-ray indicates a likely subperiosteal origin.

Fig. 52-3. Bilateral intraosseous ganglion cyst, in a male aged 48 years.