

Fig. 3. A whitish mass surrounded by a cartilaginous surface about $4.0 \times 2.5 \times 0.8$ cm in size which was removed. Chondromalacia of the patellar cartilage of about grade IV was found. Arrow: patella.

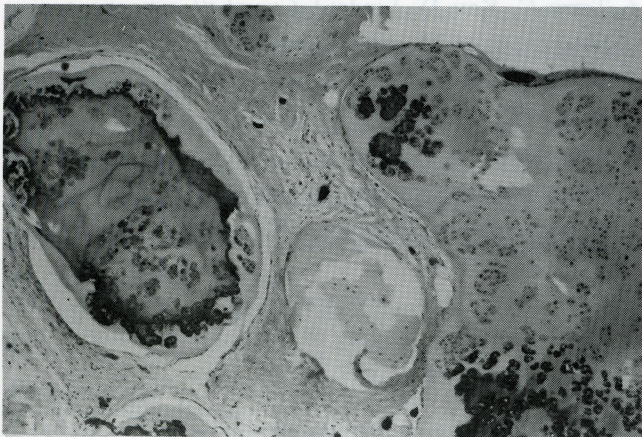


Fig. 4. Proliferation of islands of irregular cellular cartilage in the synovium with secondary endochondral calcification. (H&E, $\times 33$)

but no synovial disease.^{6,7}

Clinically, patients show a several-year history of joint pain with limitation of motion. Intra-articular loose body formation is common and may lead to mechanical destruction of the articular cartilage, with resultant osteoarthritis. In our 2 cases, there were many lesions of chondromalacia around the articular surface. Although the loose body is free within the joint space, with the vascular supply disrupted, the cartilage component may increase in size by continuous cartilage proliferation on the surface, which is nourished by

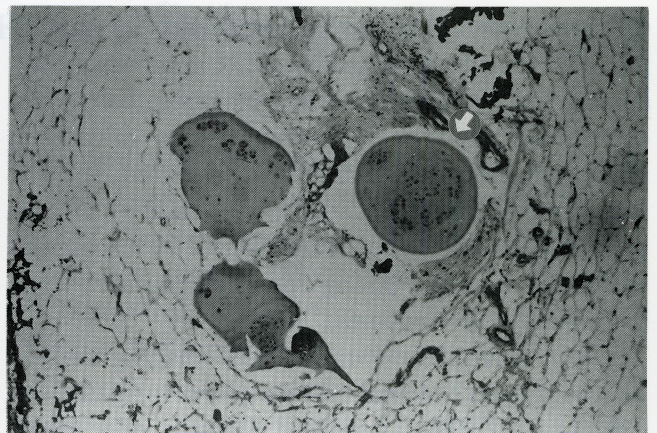


Fig. 5. Minute cartilaginous bodies (Arrow) also found in the adjacent adipose tissue. (H&E, $\times 13$)

synovial fluid.⁴

Microscopically, numerous circumscribed nodules of cartilage may be myxoid in type but more commonly are composed of hyaline cartilage. Mineralization of chondroid matrix is common. Considerable cellular proliferation with atypical nuclei is common in the subcapsular cartilage areas, and although this is often misinterpreted as a sign of aggressiveness, this pattern is still compatible with a benign process.

Radiographically, synovial chondromatosis commonly demonstrates multiple juxta-articular radiodense shadows. Bony trabeculation can be seen in the ossified osteoid areas of the nodules. Some nodules may have a density close to that of water and may show up only as soft tissue masses in the joint. The nodules may cause erosion of the adjacent bone and widening of the joint space. Noncalcified lesions are best seen on arthrography as they displace the contrast medium and produce multiple filling defects. Computed tomography alone or in combination with arthrography is useful in documenting the intra-articular location of the nodules, bone erosion, and capsular constriction or adhesive capsulitis.⁸

Although the application of MRI to the tissue diagnosis of cartilaginous lesions has not brought satisfactory results, MRI with its high tissue contrast provides excellent resolution of the bursal sac, which usually contains mucinous and possibly hemorrhagic fluid.