FIRST RECURRENCE OF OSTEOMYELITIS EIGHTY YEARS AFTER INFECTION

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This report concerns a female patient who developed acute osteomyelitis of the right femur at the age of ten years and who had the first secondary flare at the age of ninety years. No records of her early history are available but the patient has an excellent memory and recalls vividly the onset of pain, the fever and the swelling, the weeks of poulticing, and finally the incision without anaesthesia and the year of drainage and dressings that followed.

FIG. 1

Radiograph at the age of ninety years. Note the typical appearances of old osteomyelitis with thickening sclerosis, cavitation and sequestrum formation. There had been no symptoms for eighty years.

After the operation she rapidly returned to good health and after the wound had healed never had a symptom or sign until the recent episode. In the interval she had lived a healthy and vigorous life, had raised a large and robust family, and had gradually and happily slid

into those years of the "sear, the yellow leaf" without much appreciation that they are sometimes described as "declining." Then about three years ago she began to notice a throbbing and an aching pain in the lower end of the femur in the neighbourhood of the scar, and it was discovered that she was running a low-grade fever.

Examination showed an old scar on the lateral aspect of the thigh. The lower third of the femur was much thickened and slightly tender. The temperature rose daily to 100° F. and there was a mild polymorphonuclear leucocytosis. Radiographs showed a typical old osteomyelitis with a Brodie's abscess in which was a small sequestrum (Fig. 1).

Treatment—A course of penicillin gave only temporary improvement and resort was had to the older stand-by of poulticing. When the abscess was well ripened it was incised; a drill-hole

FIG. 2

Photomicrograph of a section of the sequestrum.

was made into the cavity and yellow pus under slight pressure escaped. A cavity one and a half inches long and an inch wide was uncovered and a sequestrum one inch long was removed. The cavity was partly saucerised and vaseline gauze inserted. The wound healed in a few weeks and the patient has remained well since the operation. Examination of the pus showed staphylococcus aureus.

Comment—There is nothing unusual about this case except that the interval between the outbreaks was so long. One cannot help wondering, however, whether the staphylococci we discovered were the same that caused the original trouble or whether they were their sons or grandsons. Indeed they may not have been of the same family of staphylococci at all but only some wayfarers who found a place made suitable for them by their predecessors of eighty years ago.

The presence of a sequestrum was surprising. One would have thought that after all those years it would have dissolved or succumbed to the attacks of scavengers. Yet there it was, white, avascular, and devoid of osteocytes in the lacunae (Fig. 2). The surface was much pitted and in the pits were masses of granulation tissue which in places extended into the interior of the bone. But there was none of the creeping replacement so characteristic of rarefying osteitis and of the rapid absorption and replacement that happens in an autogenous bone graft, and no sign whatever of new bone. One can only conclude, therefore, that it is hardly worth while to wait for the absorption of a sequestrum and that it had better be removed as soon as it is loose.