

celluloid, gold foil, etc.; but satisfactory results were obtained only in exceptional cases.

In certain situations osteoplastic bone-flaps have proved of service in obliterating these cavities.

Nichols, of Boston, has probably made the most important contribution to our knowledge of the treatment of osteomyelitis in its various stages, within recent years, by drawing our attention to the importance of saving the endosteal tissue in the acute stages, while providing for drainage, and of early artificial separation of the sequestrum, or rather, necrosed bone in the subacute cases.

In the acute stage he advises early opening of the bone with a trephine, enlarging this upwards and downwards as far as evidence of bone infection can be demonstrated; but on no account to curette; simply drain and wait. If sufficient endosteal tissue is thus preserved, rapid repair and filling up of the cavity may take place. If not, and central necrosis has occurred, the treatment necessary for the chronic stage is to be employed.

In the subacute stage he advises removing the dead and dying bone at a time when the actively proliferating periosteum is about 1-16 of an inch in thickness. This may be recognized by passing a needle through it, noting when the crackling sensation, due to the passage of the needle through the osteoid tissue, is first felt, and then when it is arrested by coming in contact with the dead bone; or else, remove a small portion of the periosteum at the edge of one of the openings, and estimate its thickness by the microscope. The periosteum has usually acquired this thickness in about eight weeks from the time drainage was established, and though somewhat stiff, is pliable and capable of retaining the shape into which it may be folded.

When the disease has involved one of two parallel bones, he chooses this time to perform sequestrotomy. The periosteum is carefully stripped from the bone, throughout its diseased area, the latter cut through both above and below, taking care that the section is in healthy bone. In cases of necrosis involving the whole shaft, the separation takes place at the epiphyseal line. The interior of the periosteal shell is sponged, infected looking areas may require curetting, and, after thorough sponging, is swabbed with carbolic acid and alcohol, or other antiseptics, bleeding carefully arrested, and is then folded ribbonwise, sutured at the edges along its entire extent, the overlying soft tissues closed, and drainage provided from the interior of the periosteum in several places; but particularly at the lower end.<sup>1</sup>

---

<sup>1</sup> Note method of making conical section to avoid dead spaces.