

of the extremities are more often attacked in the young, whereas the ribs and cartilages are the favourite seat of the disease in the adult. Keen states that, "out of 216 cases of bone disease, 40 were confined to the ribs and cartilages, and of the 40 cases, 35 were over the age of 35, and 5 under." The part of the bones attacked is shown by the same author to be "out of 237 cases, periostitis was present in 110, caries in 13, necrosis in 85," and he also notes that whereas, in tubercular osteitis, the general health suffers, in typhoid osteitis, on the other hand, the patient may enjoy first class health.

Chronicity, indolence and a tendency to recurrence are the three striking peculiarities, as pointed out by Osler and Parsons (Johns Hopkins' Reports), and Paget has reported a case in which five operations were done and Keen one in which he operated four times, the disease recurring each time, and in which he removed a considerable portion of the sternum and of the ribs of right side.

During the last two years we have had under our care three cases following typhoid—two having disease of the costal cartilages and one, the lower end of tibia. In one patient, æt. 35, there was disease of the sixth left costal cartilage; this was partly removed but recurring, required a second operation removing the 6th and 7th and part of the 8th cartilage before final cure. The tibial case involved the outer third of the lower end of tibia and the thorough removal of this demanded opening up the ankle joint, from which, however, the patient recovered without untoward symptoms and returned home entirely well. The last case was kindly referred to me by Dr. Tovell of Sydenham, who supplied the following history :—"Wm.—, aged 38, enjoyed good health up to Oct. 1897, when he contracted typhoid fever. After four weeks illness he had a severe pain at junction of 8th rib of right side and cartilage which continued until about Jan. '98, when a slight swelling appeared. Under treatment the swelling and soreness improved so much that during the spring and summer he was able to follow his occupation of farming, but in Oct. '98, a soft area formed in the centre of the swelling which on opening yielded a small quantity of a thin purulent fluid."

He was sent to me about March 1st and on examination I found a sinus which at operation led down to a small spot in upper border of eighth cartilage, about the size of a pea. This was