

OSTEO-SARCOMA OF THE JAW.

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[Read in the Section of Pathology, May 8, 1891.]

THIS specimen of benign tumour of the lower jaw is interesting for the fact that a very complete capsule surrounded the tumour, and, by permitting motion of it within its bony bed, gave rise to a false sense of fluctuation, so as to simulate cystic disease, and during the operation of removal allowed the tumour to be readily enucleated.

The subject of the disease was a girl of seventeen years of age, pale and of slender build, but healthy, who had lived all her life in the country. She noticed the tumour some four months before her admission to Sir P. Dun's Hospital, in last November. It had grown at first slowly, and of late more rapidly, but was free of pain. It occupied the substance of the jaw beneath the molar teeth on the right side, and some of these had been extracted in the hope of relieving the disease. The central origin of the disease in the bone was evident by the gradual expansion of the latter around the limits of the tumour. The alveolar portion of the bone and the inner plate had in part disappeared, as if absorbed by the pressure of the growth, but nowhere could any parchment crackling be felt over the enlargement. A sense of fluctuation was conveyed to the finger during the examination of the most projecting part of so marked a character that some who examined it did not hesitate to diagnose cystic disease.

This false fluctuation can only be explained by the motion which the tumour enjoyed by virtue of the capsule which surrounded it in its bony case.

In deference to the doubt expressed before the operation of removal of the tumour I made a long incision over its upper

surface with a view of removing it by the intra-buccal method, if possible, while I was prepared to divide the bone at each side of the tumour, should the lesser operation fail. In pressing aside the divided gum I was able to feel the surface of the tumour beneath, so defined and its mass so movable that although it was evidently very firm and hard I determined to remove it without any transverse section of the bone. As I pressed the curved end of a steel director behind its posterior limit, I was agreeably surprised to find it spring up out of its bed. A little turning of the mass, to allow its irregularities to fit the line of incision, permitted me to extract it entire.

The rarity of this behaviour of a tumour of the lower jaw, as well as the concomitant character of false fluctuation presented by a tumour of such density as this, are sufficient reasons for my exhibiting it.

In size the growth is not unlike the larger variety of foreign walnut. It is irregularly lobulated on the surface, and in a small part of its surface there is a crisp layer of structure, which is the remains of the jaw almost completely absorbed.

The structure of the tumour is hard, and it cuts with a distinct grating from the presence of earthy particles in its substance; to use Sir Philip Crampton's graphic expression, it breaks short—in other words, the features of the growth are those of his “benign form of osteo-sarcoma.”

Dr. Patteson has kindly made the microscopic examination of the tumour, and gives the following account of its appearance:—

“I have examined the tumour, and find it to be definitely surrounded by a fibrous capsule (at least the portion selected); the mass of the tumour fibrous in character, merging in many places into a sarcomatous type, and with numerous islets and trabeculæ of osseous tissue scattered throughout. At one part on the surface a destructive absorption, and not a building up, of bone seems to be taking place. For a name to describe it, one may call it an *osteo-fibro-sarcoma*.”