THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XI.]

WEDNESDAY, AUGUST 13, 1834.

[NO. 1.]

CASE OF OSTEO SARCOMA OF THE LEFT UPPER MAXILLARY BONE,

IN WHICH THE WHOLE OF THE DISEASED BONE WAS REMOVED BY M. BLANDIN,
SURGEON TO THE HÔPITAL BEAUJON.

THE subject of this operation was a female, fifty-five years of age, habitually healthy, and the mother of several children, who enjoy good health; she affirms that she never contracted syphilis, and traces the commencement of her disease to six months back. At this period one of the left upper molar teeth became spontaneously the seat of excessive pain, loosened, and in a short time fell out, leaving an opening which never closed since. At the same time two small fleshy tumors, as large as a pea, red, and smooth, developed themselves on either side of the fistula, which gave issue to a small quantity of puriform mucus, fetid, and sometimes mixed with blood. A surgeon being now called upon, made some trifling incision, which gave issue to some blood, and from that day the tumors gradually enlarged.

On being received into the hospital, 11th of March last, she presented the following appearance:—At the roof of the mouth there was a red, smooth, fungous tumor, but it was not ulcerated, and did not bleed; this tumor comprehended the whole breadth of the left upper maxillary bone, and occupied from before backwards the alveolar ridge and vault of the palate as far as the insertion of the velum palati. The whole alveolar ridge had disappeared, and was confounded with the body of the tumor, which was as large as the half of a hen's egg. Corresponding with the presumed situation of the second or third molar tooth there was an opening, furnishing a sanious, fetid pus, through which a probe might be passed deeply into the antrum. The left cheek was elevated by the tumor, which seemed to mount up to the base of the orbit in front, and to the side of the nose laterally. The globe of the eye on this side was not displaced; the patient experiences great intermitting pain in the tumor, and has been affected with headache, though not latterly; she coughs a little, and expectorates mucus mixed with pus from the alveolar fistula; the general health was not altered.

During the following days the little finger could be introduced into the maxillary sinus through the fistula, and feel some irregular but smooth fungosities in the interior of that cavity; not a single point of its parietes presented the osseous resistance characteristic of a healthy state; the examination was followed by a discharge of blood; the progress of the tumor latterly had been very rapid; it had exceeded the median line to the right, and gained the inner edge of the right superior maxillary bone.

MM. Margolin and Blandin, seeing the quick manner in which the osteo sarcoma advanced, were of opinion that complete removal of the whole superior maxillary bone was necessary, and on the 18th of March, M. Blandin, in the presence of several surgeons, proceeded to the operation.

The patient was retained in a chair by two assistants, and the operator placed himself before her, having on his left all the necessary instruments arranged in perfect order, and under the care of another assistant. The left half of the upper lip was put in a state of tension between the left hand of the operator and an assistant, and an incision was made, commencing over the os malæ, below and outside the external angle of the eye, and dividing the upper lip two or three lines in front of the left commissure. The coronary branches were now tied, and the threads cut close to the knots. The external flap, sufficiently dissected back to expose the anterior edge of the masseter muscle, was committed to an assistant; the internal flap was also dissected from below up, and from without inwards; the wing of the nose was separated from the maxillary bone, and turned up; the corresponding nasal fossa opened in front, outside, and below; the perpendicular process of the superior maxillary bone, and the base of the orbit, were exposed. The globe of the eye, with its cellular tissue, separated from the floor and inferior angles of the orbit, was pushed up by a spatula.

During this first period of the operation, the soft parts alone were interested; it now remained to separate the hard parts. The globe of the eye was carefully elevated inwards, together with the internal flap, while the external one was depressed in the opposite direction; a small hand-saw was now placed on the middle of the articulation of the superior maxillary with the malar bone; the flat of the blade being parallel to the median line, and directed from before backwards, regarded the anterior extremity of the inferior orbital fissure in such a manner, that the anterior angle of the os malæ was on the inner side, and the malar process of the superior maxillary bone on the outer side, of the cut.

The anterior moiety of the osseous mass placed in front of the inferior orbital fissure being thus divided, the separation was continued as far as the latter fissure, with the gouge. As the instruments were now to be directed against the inferior and inner edge of the orbit, the globe of the eye was raised outwards, and the internal flap turned to the right side. The saw being fixed on the external face of the ascending process of the superior maxillary bone, divided it obliquely from above, downwards, and from without inwards, in an oblique direction, passing through the superior external and inferior internal angles of the orbit, and directed from before backwards toward the posterior third of the speno-maxillary fissure. The ascending process having been thus divided by the saw, the separation of the bone as far as the speno-maxillary fissure was completed with the gouge, following precisely the ethmoido-maxillary fissure of the orbit.

The osseous portion which was to be amputated being thus separated superiorly both on the outer and inner sides, still remained attached behind the tuberosity of the maxillary bone, at the vault of the palate and the wall of the nasal fossæ. The internal flap being raised sufficiently,

together with the upper lip, the left index-finger was introduced deep into the mouth, which was kept open by means of a cork ; the finger served to protect the velum palati and to direct a long strong pair of scissors, which were introduced from before backwards through the nasal fossæ, each fossæ receiving a blade ; the septum was thus divided parallel to its base, where the vomer is very thin.

The necessary number of teeth were now extracted, and the bistoury traced on the gum and roof of the palate the line which the saw was to follow. This instrument divided the superior alveolar edge parallel to the median line, and from before backwards. The section was completed with the gouge, by which the osseous portion of the roof of the palate was divided in its whole length. The left moiety of the velum palati was now separated from the rest by means of a transverse incision, which, passing along the posterior edge of the horizontal portion of the palatine bone, was directed between the pterygoid process and the maxillary tuberosity. The soft parts being thus divided, the gouge was employed to separate the superior maxillary and palatine bones from the sphenoid, acting obliquely from above downwards, and from without inwards. The tumor was now completely isolated, it could be seized between the fingers, and when all the soft parts were cut through, its removal was terminated.

The result of this operation, in which the internal pterygoid muscle was completely exposed, was the formation of a vast cavity where the left orbit, nasal fossæ, the pharynx, and mouth, all communicated. The parts were now cleaned with a sponge, and some fragments of the orbit and palatine bone, with some fungous excrescences, were removed ; the edges of the wound were now brought together with eight strong pins, on which the twisted suture was placed ; the cheek did not present any sensible depression.

The consequences of this difficult and long operation did not present anything remarkable, the termination being most fortunate ; there was very little reaction, whether general or local ; neither hemorrhage nor nervous symptoms supervened. During the first few days the patient expectorated some mucus, at the beginning mixed with blood, but soon becoming yellow. On the 21st we observed over the upper eyelid and left cheek a little redness and œdema, but these were quickly dissipated. The patient, whom we could not comprehend at all at first, was soon able to make herself well understood, though the voice was nasal. Finally, she was able to leave the hospital in the beginning of May, when she presented the following appearances :—

On the cheek a simple cicatrix. In the cavity of the mouth, a sort of perforation of the velum palati, establishing a communication between the mouth and nasal fossæ, permits us to see the septum and turbinated bones. This artificial perforation is limited in front by the cheek ; behind by the left moiety of the velum palati ; its edges are completely cicatrized. The left cheek is a little fallen in, and the left wing of the nose, being drawn closer to the septum than natural, diminishes a little the nostril of that side.

The examination of the tumor which was removed, perfectly confirmed

the diagnosis ; it was composed of true osteo-sarcomatous tissue, by which the greater part of the bone had been destroyed.

This case of complete removal of the whole of the superior maxillary bone, joined to a few other authentic ones, which are recorded within the last few years, proves that this operation, though in appearance dangerous and frightful, must take its rank amongst the other great efforts of the art; to remove a disease otherwise inevitably mortal.—*Lancet*.

CASE OF DISLOCATION OF THE FEMUR INTO THE FORAMEN OVALE.

BY O. B. BELLINGHAM, M.D.

HUGH MURRAY, aged about 55, a laboring man, was at work in a gravel pit, near Carrickmacross, county Monaghan, when part of the side, which was undermined, fell in and buried him up to the neck. According to his account he was thrown on his face. I saw him early the next day, when I found that he had a comminuted fracture of the shaft of the left femur, and a dislocation on the right side of the head of the bone into the foramen ovale, the symptoms of which were as follows :—The knee and foot were a good deal separated from the other ; the toes were turned out, and the knee was bent ; there was a depression where the great trochanter can be felt in the natural state, and the head of the bone could be felt at the upper and inner part of the thigh, to which place the pain was referred. I could not perceive that the body was much bent forwards, and the shaft of the other thigh-bone being broken, it was difficult to say whether the limb was lengthened.

The reduction was effected by fixing the pelvis by means of a girth placed between the pudendum and thigh, which was firmly held by an assistant (such as I could get amongst the poor man's friends, as there was no other medical man within a distance of some miles) ; then grasping the ankle of the dislocated side, making a certain degree of extension, and drawing it over the other ankle, when the bone slipped into its socket, with a noise heard by those around, the patient lying on his back during the time.

In this case the diagnosis may be said to have been somewhat more difficult than it usually is, from the comminuted fracture of the opposite thigh, as it could not be well determined whether the dislocated limb was lengthened, and from the almost total absence of the bent position of the body, which Sir A. Cooper has given as one of the first diagnostic symptoms. However, the great separation of the knee and foot from the other, the turning out of the toes, the depression where the great trochanter can be felt in the natural state, the protuberance caused by the head of the bone on the inner side of the thigh, the knee being flexed, and the impossibility of extending it, together with the seat of the pain being referred to the situation of the obturator foramen, left no doubt of the nature of the accident.

I should have mentioned, that before I proceeded to the reduction, I administered a solution of tartarized antimony, but it did not produce the slightest nausea. The whole operation did not take up many minutes,