A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum, et dissectionum historias, tum aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

CHARING-CROSS HOSPITAL.

Rapid Necrosis of the Tibia; Amputation above the Knee according to Mr. Luke's method.

(Under the care of Mr. AVERY.)

THERE are certain operations in surgery which entail a large share of trouble and exertion on the practitioner; among these we would single out the removal of dead bone firmly encased in a new shell. This task becomes still more difficult to accomplish when the necrosed bone is not completely detached, or the new osseous case is very hard. This applies principally to long bones, for necrosis in short or irregular ones is much more easily managed, since the dead portions lie generally more superficially. We have seen necrosed parts of the os calcis and lower jaw thus removed with comparative ease; but about the pelvis the dead portion may be situated so deep that it is difficult to diagnose the kind of change which has taken place, (see a case under the care of Mr. Fergusson, at King's College Hospital, *THE LANCET*, vol. i. 1852, p. 612.)

From the cases we have published, and from the numerous operations upon long bones which we constantly witness, we should almost be inclined to think that the trephine is not used with sufficient freedom; for it occurs very frequently that one small aperture in the new shell is not adequate to the size of the sequestrum, and does not present enough space for a proper purchase. Very great exertions are thus used with unsatisfactory results, whilst one large aperture, or two or three separate ones, would offer every facility for the removal of the dead portion of bone, provided the latter were quite detached, and ready to be thrown off. Mr. Avery's case does not, however, come under this head: there was, as in those to which we are alluding, extensive necrosis, but from the circumstances presently to be mentioned, none of the ordinary steps could be taken; amputation was unavoidable, as will be seen by the following details.

A. B——, aged fourteen years, was admitted in May, 1852, under the care of Mr. Avery. The boy, who presents various strumous characters, states that five months before he came into the hospital, he received a sharp blow on the front and middle of his right tibia. This injury was followed by a good deal of pain and swelling; abscesses formed and opened, and sinuses remained communicating with the tibia in different parts of its length. There had also been considerable inflammation of the knee-joint, which was flexed, deformed, and firmly held by false ankylosis; on admission, however, there was no active disease in the joint. A portion of necrosed bone, above five inches in length, could be made out on the front part of the tibia, but it was perfectly immoveable. On probing one of the fistulous passages, the instrument entered the cancellous structure of the bone, just below the knee-joint, and came upon necrosed bone. It was likewise ascertained that the lower extremity of the tibia was much enlarged down to the ankle-joint, it being extremely probable that dead bone was also enclosed in this part of the shaft. The limb was altogether wasted, and the boy had, as above stated, all the appearance of a strongly-marked strumous habit. His inferior maxillary bone was much enlarged on the right side, also in consequence of a blow, and his general health in a declining state.

Mr. Avery, after mature consideration, came to the conclusion that amputation would be preferable to making an attempt to remove the sequestra, his opinion being supported by the following facts:—1. The immoveable condition of the necrosed portion of bone. 2. The evidence of the disease having extended upwards close to the knee-joint, and downwards near to the ankle. 3. The boy's weak health, and marked strumous habit; and 4, the ankylosed state of the knee-joint.

On the 17th of May, 1852, the operation was performed,

after Mr. Luke's plan. Mr. Avery made first an ample flap posteriorly by piercing and cutting from within outwards; he then made an equally large flap anteriorly, *not* by piercing and cutting as was done with the posterior flap, but by carrying the knife in a curved direction, antero-posteriorly through skin and muscles, down to the bone. The exact shape of the flap can thus be distinctly delineated, and made with great regularity, exactly to the size best calculated to make a good stump. The appearance of the latter immediately after the operation, showed very forcibly the advantages of this method, as the two flaps formed at once a symmetrical thick and clean cushion for the bone. Nor did the appearance of the stump, when cicatrization was complete, prove less satisfactory. A fortnight after the operation there was only a very slight discharge at one angle of the wound, the latter having almost all healed by first intention. One month after the amputation, the stump was as round as a ball; it offered a perfect model of its kind, and Mr. Avery expressed the opinion that it was quite impossible to get so ample and good a flap anteriorly, by the ordinary method of transfixing and cutting from within outwards, as had been obtained in this instance by Mr. Luke's method.

A longitudinal section of the tibia in its entire length brought to light a large sequestrum, five inches long, and half the thickness of the shaft, firmly impacted, but still capable of being removed, by using a certain amount of force. There was, however, a considerable portion of dead bone enclosed in the cancellated structure, somewhat higher up, and very near to the epiphysis, and another equally near to the inferior epiphysis. The latter sequestrum was surrounded by a considerable thickness of new deposit. Both these sequestra were imbedded in a gelatinous substance of a light yellow colour, having no resemblance with pus. Was this simply strumous matter? or was it a fibrinous exudation thrown out in view of the formation of new bone? Both the epiphyses were sound, but the knee-joint was firmly fixed by adventitious structures, and partly dislocated.

There are examples in the annals of surgery of very rapid death of certain long bones, but authors and practical men agree that this pathological change is of rare occurrence. The destructive process was in Mr. Avery's case especially quick: five short months, and almost the whole shaft of the tibia had perished. The knee-joint was disorganized, and the local mischief had so completely affected the system, that no chance was evidently left but to remove the source of irritation. It is to be hoped that this operation, the rest, good food, and appropriate treatment which this boy had in the hospital, will have so modified his diathesis as to arrest the development of the same pathological phenomena in the jaw as have appeared in the tibia. Indeed, the enlargement of the former had on the patient's discharge considerably diminished.

A case of a similar character was some time ago reported in the "Mirror," (*THE LANCET*, vol. i. 1852, p. 479.) Mr. Stanley, under whose care the patient was placed at St. Bartholomew's Hospital, was likewise obliged to amputate above the knee, the patient (a girl of fourteen years) having been attacked but two months before her admission with acute inflammation of the knee-joint and the shaft of the tibia, followed by the complete death of the latter.

We saw the stump shortly before Mr. Avery's patient left the hospital, and we must confess to having hardly ever seen such a thick, regular, firm, and healthy-looking stump. We earnestly hope that Mr. Luke's method will be more extensively adopted; for it may be suspected that the necrosis of the extremity of the divided bone, which occurs so very frequently after amputation of the thigh, and which is so harassing, both to the patient and the surgeon, is owing to the defective covering which the bone sometimes obtains when amputation is performed according to the ordinary method of making flaps. Nor should it be forgotten that the skin and areolar tissue, which are intended to protect the bone after the circular operation, are sometimes very weak and thin, and that the extremity of the bone not unfrequently protrudes through them.

The objection sometimes brought against the ordinary flap operation, and which would hold good against Mr. Luke's, is that the wound made by the knife is much more extensive than is the case with the circular amputation. But as with chloroform we have no shock, and since the amount of the suppuration is pretty well the same in both operations, the objection falls to the ground; the more so as it is proved that when the flaps are well made, after Mr. Luke's plan, there is much chance of union by first intention, and the immense advantage of a firm, round, and healthy stump. Mr. Avery's case presents us with an excellent illustration of the good effects of

the method above alluded to; we harbour the hope of being soon afforded the opportunity of recording another.

Fissure of the Soft and Hard Palate; Operation.

By Mr. AVERY.

We dilated a little time ago upon the important improvements which have been introduced in the operation for cleft palate by Mr. Fergusson, (*THE LANCET*, vol. i. 1852, p. 117,) and we are glad to find that this new method of operating is more and more adopted by practical surgeons. Mr. Avery, amongst others, has published the very satisfactory results which he has obtained from the division of certain muscles connected with the soft palate, (*THE LANCET*, vol. ii. 1852, p. 29,) and as we had a few days ago (August 3rd, 1852) an opportunity of seeing Mr. Avery operate at this hospital, upon a very complicated case, we shall just point out the facts which most attracted our attention:—

The patient (a young woman about twenty-four years of age) was born with harelip, and a fissure both in the hard and soft palate. The harelip was formerly rectified in the country, but the cleft palate had not been interfered with. The most interesting portion of the operation was the difficult task of detaching the tough tissues adherent to the hard palate, and lined with mucous membrane. Mr. Avery used for that purpose two instruments which rendered him great service: a scalpel, the cutting portion of which is at right angles with the stem, and scissors whose extremities are disposed in the same manner. These instruments, when introduced between the soft parts and the bone, will cut laterally; but it is nevertheless very difficult to render the former flaccid by disconnecting them sufficiently from the bone, as the locality offers a great many obstacles. Nothing of the kind could, however, be attempted, were not the surgeon aided by the courage and perseverance of the patient; the latter displayed in this instance great patience and fortitude.

The hæmorrhage was somewhat considerable, but Mr. Avery at last succeeded in detaching the soft parts from the bone, to the extent of half an inch transversely; and so disconnected were they, that they assumed all round the fissure a whitish aspect, and were quite flaccid. One point worthy of notice is, that by the above-mentioned measures the irritability of the air-passages and fauces becomes so blunted, that the subsequent passing of the ligatures produces hardly any cough or uneasiness. Mr. Avery, after having pared the margin of the soft fissure, placed the first of his threads, by the ordinary manipulation, about an inch behind the incisor teeth, and the four others (the threads being of alternate thickness) at short distances from one another down to the uvula.

It was now seen that the two halves of the soft palate did not meet so readily as the division of the levator palati and palato-pharyngeus might have led the surgeon to expect, but the apposition became quite perfect after Mr. Avery had freely carried his knife transversely through the anterior arch of the soft palate (palato-glossus.) A small aperture is left close to the incisor teeth, which, by means of the blistering fluid, will, in all probability, unite, though it should be recollected that the ligatures over the hard palate are very apt to tear through the structures.

We have merely given our impressions, in some degree, after witnessing this operation, and shall be happy to note down the final results of the case. It is by no means unlikely that great strides will, before long, be made in the mode of proceeding for the rectification of fissure of the hard palate, if we may judge from what we have seen this day.

FREE CANCER HOSPITAL.

Large Medullary Cancer of the Superior Maxilla and Malar Bone; Death; Autopsy; Transformation of both Bones into Medullary Substance.

(Under the care of Mr. WEEDEN COOKE).

It happens now and then that we trace to several hospitals those unfortunate beings who, affected with malignant disease, seek an operation which the surgeons to whom they apply are constrained to refuse. These poor sufferers thus wander from one institution to the other, until, worn down by irritation and suppuration, they sink under the fearful scourge. We have lately attempted to bring a few cases of this nature under the cognizance of our readers, (*THE LANCET*, vol. ii., 1852, pp. 7, 35.) and beg now permission to adduce another of these, which is especially valuable, as somewhat unusual pathological changes took place in the parts affected. The patient had, moreover, become the subject

of much surgical interest, as in one of the hospitals into which he was admitted, opinions differed as to the propriety of an operation.

We can easily understand how painful it must be to some surgeons to withhold from patients so deeply afflicted, the only means of escape, which, to unskilful eyes, seem so simple and appropriate; but the more cancerous diseases become known, the more are surgeons led to perceive, that it is wise, in most instances, not to operate, though it is really distressing to resist the entreaties of the unfortunate patients. The man whose post-mortem examination we are going to describe, had been seen by several surgeons, and had in the last place been admitted into St. Mary's Hospital; here the propriety of resorting to an operation was discussed, and it was decided that no surgical interference would be advisable. He finally placed himself under the care of Mr. Cooke, at the Cancer Hospital, where he died; and we now beg to present a short sketch of the case, and of the post-mortem appearances.

James W—, aged forty-five, was admitted, March 23rd, 1852, under the care of Mr. Weedon Cooke. The patient is a shoe-clicker by trade, of a pallid aspect and leuco-phlegmatic temperament; for the last two or three years he has felt pain in the left side of the face, which he attributed to cold. About four years before admission, two very small pieces of thin transparent bone came away into the mouth from the nose, together with much purulent matter. The discharge soon ceased, and the patient had no further trouble until about nine months before he was seen by Mr. Cooke, when the cheek, over the zygomatic arch, began to swell, and he then applied to a surgeon.

Three months afterwards, an exploratory incision was made, in the expectation of finding caries of the superior maxilla, and about this time a large abscess formed, which was opened, and much thick pus discharged. Poultices were used for a long time after this period, and many surgical examinations took place. A fortnight before admission, the patient went into St. Mary's Hospital, where he had the advantage of the combined opinion of the surgical officers of that institution. Among these there was some difference as to the propriety of attempting the removal of the supposed seat of disease—namely, the superior maxilla; but it was ultimately decided that no operative procedure was justifiable; these several examinations somewhat inflamed the diseased mass, and produced much pain, to which the patient was not, as a rule, much subject; indeed, there was generally an extraordinary and happy absence of suffering.

Present state.—The tumour now occupies the whole of the left side of the face, from the orbit, which it encroaches upon, to the inferior maxilla, and from the side of the nose to the ear. There are two open wounds with ragged edges, made by a lancet some time ago for evacuating purulent matter; one under the eye, the other at the angle of the jaw. The neighbouring glands are not enlarged. Bowels confined; appetite not good; sleep tolerable; pulse 126, very feeble. The patient has been taking six glasses of wine daily. Mr. Cooke ordered bark, mineral acids and opium, castor-oil occasionally, and carrot poultices.

Fourteenth day.—A large abscess has formed at the angle of the jaws; the patient is very much reduced. The abscess was opened, and two ounces of laudable pus were discharged. Continue the tonic medicines, and use zinc lotion.

On the seventeenth day the abscess at the angle of the jaws was still discharging, and there was fluid above the tissues covering the hard palate on the left side. Upon probing the two openings in the cheek, blood flowed freely; the probe did not reach any bone, but broke through soft textures. Debility increasing. Ordered quinine, iron, and mineral acid.

The patient has been oscillating for the last two months, now better and again worse, and the enlargement of the face has gone on slowly, with occasional bleedings. The palate is more bulged, and the eye more encroached upon; there is not much semi-purulent discharge from the openings in the cheek. The man is much emaciated, and unable to leave his bed; he is sleepless, but not from pain; the appetite is bad. Ordered a soap-and-opium pill each night, with large doses of quinine and ether.

The patient continued to get gradually weaker, and had occasional attacks of hæmorrhage. The whole of the side of the face soon became implicated, the enlargement extending from the temple to the lower jaw, encroaching upon the neck and making the mouth awry, as well as pushing the nasal cartilages to the opposite side.

On July 4th, nine weeks after admission, the patient died, having for a day or two previously suffered from sickness and