

some hours previous to the operation the sponges, instruments, ligature &c., were soaked in a 5 per cent carbolic lotion, and just before the operation the Assistant-Surgeon and I washed our hands and the patient's neck with a similar lotion.

The sterno-mastoid being much wasted, its anterior edge was not easily defined. A small superficial artery spouted and was tied; there was no other bleeding beyond a slight oozing. A pretty large anterior jugular vein ran parallel with the inner lip of the wound, and was avoided, as was also a vein which crossed the wound near its upper end. After the upper edge of the omo-hyoid muscle was cleared the descendens noni nerve came into view; avoiding it, the carotid sheath was opened at its inner side and a ligature passed round the vessel; the internal jugular vein was not seen; the ligature was of silk, and doubled (very unnecessarily); when it was tied all pulsation ceased in the tumour; the wound was washed out with a 5 per cent. carbolic lotion, and all oozing having ceased, I tied the sutures, the end of the ligature being brought out at the lower angle of the wound for drainage. Over the wound I placed three folds of dry boracic lint and a large pad of cotton—a roller round the neck holding all in position.

With regard to the subsequent progress of the case I may say at once there were no "head symptoms." For some days the right side of the head was perceptibly colder than the left; the superficial veins of the head, especially of the right side, became much swollen. After a few days I noticed that the right side of the head was moist, the patient said this had been the case for a long time, I had not however noticed it previous to the operation; doubtless it indicated pressure on the cervical sympathetic. I omitted to note the condition of his pupils, but I observed that whenever he closed his eyes both eyeballs rotated upwards and outwards: why, I don't know.

The wound healed by first intention. The sutures were removed on 27th, around each was a small drop of inodorous pus. The main ligature remained in his neck till 19th April, it was held by the knot which was very big, owing to the silk having been unnecessarily doubled. On the 28th February slight pulsation was observed in the tumour; the tumour neuvre hardened as a consolidating aneurism should; the pain also became severe again. On 10th March I asked myself might the case not be tumour of the parotid with the external carotid running through it?

As the case went on pus began to discharge from the ear, and some pointed behind the ear, this I let out, and soon afterwards found that the bone beneath was bare. The pulsation almost entirely ceased, sometimes it could not be felt at all. The lower part of the tumour remained rounded like an aneurism, but the upper part increased a little and became uneven. On 3rd June I passed the needle of a Hypodermic Syringe into the tumour, and exhausted the syringe; a few drops of blood (bright) came out, and pulsation returned in the tumour, slight however, and nothing like what it had originally been. The patient kept in pretty fair health up to October, then the symptoms of malignant disease became unmistakable,—rapid growth, implication of the skin, fungation, severe pain, occasional hæmorrhages, glandular implication, fætor, emaciation. He died on 30th November.

On examination of the body next day, the disease was found to be encephaloid of the parotid gland. Peripherally, to a depth of about half an inch, the tumour looked like congested cerebellum; centrally it was like boiled udder (Erichsen); the external carotid was lengthened, it ran at first superficial to the tumour, but afterwards sank into it. The tumour extended very deeply, the pinna was quite separated from the external auditory meatus, and the bone all round the latter was eaten away and covered with a horribly fetid slough. The tumour extended almost to the jugular fossa, it encircled the internal carotid for a small part of its jugular course; lower down it touched the transverse process of the atlas. The tendon of the posterior belly of the digastric muscle was lightly stretched across the lower end of the tumour, and was much elongated. I regret I made no attempt to trace Steno's duct. The ramus of the lower jaw was much atrophied from pressure.

Aneurism is doubtless a rare disease amongst natives of this country, still I suppose it is sometimes met with.

In this case most of the symptoms of aneurism were present, but if I may use the expression, they were deficient in quality, especially was this true of the pulsation which was not quite what the thump of an aneurism should be.

The poor patient did not perhaps suffer much from the mistake, indeed the operation may have retarded the growth of the tumour for a while, not however that I think the possibility of such a benefit would have justified the operation had a correct diagnosis of the case been made originally.

Mozuffarnuggur, N. W. P., 15th December, 1880.

FUNGUS DISEASE—RECURRENCE AFTER AMPUTATION.

BY SURGEON DONALD F. DYMCK, M.B., LOND.,
Madras Medical Service.

The patient, a cooly aged 30, was admitted into the General Hospital, Madras, on the 21st of October 1880. He states that he is a native of Nellore, where, twenty-three years ago, he was wounded by a thorn in the sole of his left foot: the wound healed and gave no further trouble. Five years ago he noticed a swelling in the sole of his left foot. The swelling increased until it involved the whole of the foot and the lower half of his leg. Five months ago he went into the Hospital at Nellore where amputation of the leg was performed at the junction of the middle and upper thirds. He remained in hospital for about a month, and was then discharged apparently cured. Soon afterwards he noticed some small tumours appear on the stump and also on the left thigh, similar to some which had existed in his left foot. The tumours increased in size and number, and the stump became swollen and painful.

The patient is a well-nourished, healthy-looking man. The left lower limb terminates about four inches below the knee-joint in a rounded stump in which there is a narrow healthy cicatrix. There is uniform enlargement about the knee-joint, and also some tenderness on deep pressure. There are fourteen distinct tumours projecting from the surface of the limb, eight of which are in connection with the thigh. The largest of the tumours is situated above the middle of the thigh on the fore part of its inner aspect; it is irregularly circular, about two inches in diameter, and depressed in the centre. The other tumours vary in size from a small hazelnut to that of half of a walnut. All the tumours are soft and fluctuating. The tissues around are not at all indurated or inflamed. Most of the tumours have quite a smooth surface, one or two however have a slight, puckered depression in the centre. There is a small amount of reddish, jelly-like exudation from a depression of one of the tumours. No enlargement of glands in the groin can be detected.

On October 22nd Surgeon-Major Cockerill amputated the thigh; the femur being sawn through about one inch below the trochanter minor. Some soft brownish looking material, in the subcutaneous fat of the posterior flap, was excised.

On examining the removed portion of the limb, the cut surface of the bone and muscular structures was found to be quite healthy. The limb was then laid open from top to bottom, the incision passing through the centre of the largest tumour and displaying its appearance on section. The tumour was found to be covered with cuticle no thicker than brown paper, immediately underneath was the distending material which was bounded abruptly below by the subcutaneous fatty tissue. From the depressed portion of the tumour a strong white fibrous band passes directly into the subcutaneous fat.

The contents of the tumour consist of a reddish brown, semi-transparent, jelly-like matter, in which yellow caseous looking masses are found; these yellow masses vary in size from a small pin's head to a hempseed.

Under the microscope the contents of the tumour are seen to be composed almost entirely of cells, including several blood corpuscles. Some of the red blood cells were irregular in shape and disintegrating. There were numerous cells similar in appearance to white blood corpuscles, also some larger pale granular cells of various sizes, many being more than twice as large as a white blood corpuscle. There were also some mulberry-like masses, with diameters three times larger than that of a red blood corpuscle. These masses were almost globular, yellow or yellowish brown in color, and composed of numerous minute globular bodies equal in size and aggregated together.

No distinct fungus material could be detected.

One enlarged lymphatic gland was found in the popliteal

space. The tissues around it were apparently quite normal. The gland was brownish in color and had an elastic feel, on squeezing it it burst, and its contents were seen to be similar to those of the surface tumours.

Remarks.—The interesting points about this case are—the undoubted implication of the lymphatics; the recurrence of the disease after amputation, and the presence of the disease so high up in the limb. The specimen is preserved in the Museum of the Medical College, where there is also a “fungus foot” removed by Surgeon-Major Cockerill in March last from a Hindu boy, in whom the glands below Poupart’s ligament were extensively involved. In both cases the disease was of the pale variety according to Carter.

CASE OF OSTEO-SARCOMA.

BY G. D. MACREDDIE, M. D.,

Civil Surgeon, Partabgarh.

Ram Dayal, aged 50, Chutree, was admitted into the Partabgarh Dispensary on the 3rd September 1880. He had a round tumour attached to the hard palate, projecting from the posterior free edge of palate downwards into the throat, depressing the root of the tongue and impeding deglutition, respiration and speech. In size the tumour was about 2” in diameter, very hard and immovable at its superior attached border, inferiorly it was movable. It was of a year’s duration. Patient at present is much reduced from the inability to take sufficient nourishment. The removal of the growth was at once determined on. As the danger of the operation for its removal consisted mainly in blood-regurgitating into the air-passages, it was determined to adopt Dr. MacEwen’s procedure: an elastic catheter was introduced into the larynx, and some distance into the trachea—the patient respired through the catheter. It was intended to plug the fauces all round the catheter so that respiration could be carried on through the instrument. Chloroform would be administered by the same passage. When however the patient was brought on the operation table, it was seen that the catheter would interfere with the manipulative steps necessary for the operation. It was therefore decided not to give chloroform, and to withdraw the catheter from the wind-pipe. The tumour was too large to be withdrawn whole from the mouth, it was therefore cut through the middle with bone nippers, and half thus withdrawn. The remaining portion was first ligatured with strong twine and then turned out of its capsule; the whole of the tumour was extracted. A knife was only used to divide the mucous membrane. There was a good deal of venous bleeding, and the patient washed out his mouth frequently during the operation; no arterial vessel was divided. In structure the tumour consisted of hard fibrous tissue infiltrated with bone particles. No neighbouring structures were implicated.

Microscopic Appearance.—Closely interlacing fibrillae, straight and wavy, with minute cells amongst fibrillae; cell element spare; fibrillae abound. Bone cells interspersed in posterior part of tumour. The tumour is an Osteo-sarcoma. *Partabgarh, 27th November 1880.*

COMPOUND COMPLICATED FRACTURE OF LEFT HUMERUS AT THE ELBOW JOINT: PRIMARY AMPUTATION: RECOVERY.

BY SURGEON D. BASU,

Officiating Civil Surgeon, Faridpur.

A case of compound comminuted fracture always requires particular care in its management, but as a matter of necessity does not require such a severe measure as amputation. But there are circumstances under which even this severe mode of treatment is resorted to. Although opinions vary as to the propriety of performing primary amputation in individual cases, yet it will be observed that some of the qualifying circumstances have been uniformly mentioned by all hands to indicate primary amputation. The presence of one or more of such circumstances and conditions makes the case a “complicated” one. These circumstances do not merely refer to the outward condition of the limb, but also to the cause of the fracture, the particular manner in which and the instrument with which the fracture is caused. For example, the fact of a fracture being caused by the penetration of a rifle bullet, or by a spent ball, by the blow of a

heavy club, by the contraction of muscles, or by the resistance of a solid hard body against which a fall is sustained, will be taken into consideration in the management of the case.

Again the fact of a compound comminuted fracture taking place simultaneously with a simple one higher up; with the exposure of a neighbouring joint, with extensive bruising and laceration of soft parts, or with injury to the main blood-vessels and nerves passing through or supplying the part, will so far modify the case as to indicate different modes of treatment. Some of these conditions will so modify as to demand primary amputation of the injured limb. But it is a known fact that primary amputations are more fatal than secondary ones, therefore a patient should not be put to the additional risks attending on primary amputation except under very grave necessity. Professor Erichsen’s views on the point are most distinctly given in his famous treatise on Surgery, Vol. I. p. 280, only one sentence out of it will be quoted here. “When the elbow or the shoulder joint is the seat of the compound comminuted fracture, with extensive injury of the soft parts, and possibly laceration of contiguous nerves or large blood-vessels, the case is one for immediate amputation.”

Mr. Hornidge (Holmes’ S. G., vol. II., p. 44) also refers to those complications which require primary amputation of a limb for fracture. Mr. Hulke is somewhat more hopeful about these cases. He says, “Primary amputation is very rarely required in cases of compound comminuted fracture or dislocation involving the elbow-joint, never indeed unless the artery be torn through or the soft parts in front as well as behind the joint extensively damaged.”

Although there is this difference of opinion on the point, it is I think prudent in this country to adopt Professor Erichsen’s views, more particularly as the great mass of the malaria-stricken population of Bengal cannot be compared with the healthy and robust people of England, and also because all the facilities of a big British hospital cannot be had in the majority of the public dispensaries in this country; for on these two circumstances the recovery of a patient always greatly depends. Hence, although primary amputation is not indicated in the majority of cases of compound comminuted fracture of the upper extremity, in the following case the operation was performed for compound comminuted fracture of the lower end of the humerus, complicated by exposure of, and injury to, the elbow-joint, and contusion of the median nerve and brachial artery, and occlusion of the latter.

Kalichurn, a Hindu male, aged 32, had a fall from a height of about 6 or 7 feet, with his left arm extended, at about 8-30 A.M. on the 17th September last. As a result of the fall his left arm broke about the elbow-joint and he bled copiously from the wound. He was admitted into Faridpur Charitable Dispensary at about 2 P.M. Then he had a contused and lacerated wound about 2½ inches long on the anterior aspect of the left upper arm, just above the bend of the elbow; through this wound was seen protruding for about 2½ inches the lower end of the shaft of the humerus, with a part of the trochlear surface attached to it. The upper arm was greatly swollen; the left hand felt cold. No pulse could be felt at the left wrist.

The man’s general health was pretty good. At first it was thought that the absence of the pulse was due to a temporary pressure of the bone on the artery. The protruding end of the bone was sawn off for about an inch, and the fracture was reduced by extension, but pulsation did not return. Then it was concluded that the injury to the artery must be permanent. Then, as the bone was broken into at least three or four pieces, and as the joint was injured and the soft parts infiltrated with blood, amputation was performed under chloroform at the middle third of the arm by the lateral flap method; silk ligatures and iron wire sutures were used. The wound was washed with strong carbolic lotion and dressed with carbolic oil under an antiseptic spray. A dose of laudanum and chloric ether was given after operation; and subsequently a quinine and iron tonic. He got only slight fever for two or three days. The only unpleasant symptoms that he suffered from, was inability to make water for about a week. On the 18th of October his stump had nearly healed, but he had to attend the dispensary for a few days more.

After the operation the amputated limb was carefully dissected, when it was found that the condyloid processes had been broken off, the anterior and lateral ligamentis torn, the brachial artery twisted and abraded for about 1½ inches