

the ankle-joint, in the same manner as in the preceding cases. The patient progressed very favourably, though some suppuration took place in the sheaths of the tendons. About three weeks after the operation she had an attack of erysipelas, which did not, however, materially interfere with the cicatrization; the stump healed perfectly, and the patient left the hospital seven weeks after the operation, with a very serviceable stump.

CASE 4.—Richard B—, aged thirty, was admitted June 26, 1850; he is single, a smith, and has lived the last ten years in London. Six months previously he sprained his right ankle; the next day it began to swell, and about two months afterwards an abscess formed; this was opened, and soon followed by another, which was also lanced. When admitted, the ankle was swollen, inflamed, and painful; there were two ulcers, one behind and one in front of the inner malleolus. A probe could be passed by these openings into the joint between the tibia and astragalus.

On July 20th Mr. Fergusson removed the foot at the ankle-joint, taking away the articulating ends of the tibia and fibula. For the first week the patient went on well, and the stump, though languid, was granulating and healthy. On the sixth day after the operation, the patient was attacked with symptoms of abscess in the lung; he had difficulty of breathing, and slight pain in the right side; suddenly he began to cough up large quantities of foetid pus, and an abscess formed at the same time on the inner side of the stump, and burrowed up about two inches. Mr. Fergusson opened this, and removed some spicula of bone from the end of the tibia. After this the wound improved, and was covered with healthy granulations; but the coughing up of purulent matter continued, and he died September 4th, five weeks after the operation.

Post-mortem examination.—Lungs: The left was healthy; the right covered by tubercles, and vomicae were scattered through its substance; near the inner side of the lower lobe a large vomica communicated by a small aperture with the pericardium, to which the lung was adherent. The heart was much atrophied; and the pericardium adherent, except on the right side, where a large abscess was situated; the walls were much thickened. Liver: Much enlarged, pale, and fatty. Kidneys: Healthy. Stump: The ends of the tibia and fibula were healthy; a large sinus, three inches and a half long, extended up by the side of the tendo Achillis.

Mr. Fergusson considers that part of the flap invariably sloughs; but that the cases of amputation of the ankle-joint generally turn out favourable, though it is not quite ascertained whether the stumps ultimately form solid resting points. Mr. Fergusson has introduced a modification to the operation, and is now in the habit of running his knife round at the promontory of the heel, and a little higher than usual in front of the foot, for too short a flap has been known to be drawn downwards. The most desirable place for the cicatrix is the front of the joint, and this is easily attainable by the modification which Mr. Fergusson has introduced; the dissection is far from being tedious, and is very easy around the os calcis.

We had purposed referring to a fifth case, now in the hospital, and which, from a variety of circumstances, has not turned out favourably. It was likewise our intention to mention some amputations at the ankle-joint performed at the London Hospital; but the extent of the foregoing reports will prevent this, and we must, for a little while, defer the completion of the subject.

ST. THOMAS'S HOSPITAL.

Epithelial Cancer round the Anal Orifice; Removal; Recovery.

(Under the care of Mr. SIMON.)

WHICH is the most advisable course for the surgeon to pursue, when he has to deal with epithelial cancer? Shall he, under certain circumstances, remove the semi-malignant growth, or the limb where it has sprung up? From the testimony of the best authors, and from what we have seen ourselves in the metropolitan hospitals, we would incline for the severer of the two measures. This opinion is not so much grounded on nice pathological considerations, as on the undoubted fact of speedy reproduction, with which the observer unavoidably meets in his intercourse with patients. Look at the numerous scrotum and lip cases; here the lymphatic glands are almost sure to be secondarily attacked. And as for reproduction on the cicatrix itself, examples are not wanting. (Mr. Fergusson's case, *King's College, THE LANCET*, Nov. 3, 1849, p. 476; Oct. 12, 1850, p. 421.) Mr. Dixon, at

St. Thomas's Hospital, in a case of epithelial cancer of the dorsum of the hand, removed the forearm at once. (*THE LANCET*, Nov. 17, 1849, p. 529.)

It will doubtless become more and more the practice to take off the limb, when the disease is fully established; but when such an operation is not feasible, there is of course no means left but to excise the malignant growth, and to run the chance of recurrence. One point it would be of some importance to settle—viz., whether a perfectly benign tumour may, or may not, assume, by irritation or otherwise, a malignant degeneration? The affirmative is generally maintained; and it is considered that originally simple follicular tumours may take on a cancerous character. But some surgeons find it difficult to adhere to this proposition, as they think that for a malignant *growth* there must be a malignant *germ*.

However this may be, it must be acknowledged that numerous cases come before the practitioner, in which it is evident that, *ceteris paribus*, a considerable amount of irritation has for a long time taken place, as is well known to happen in scrotal cancer. That a peculiar germ is sometimes generated, and that this germ may for a long period lay dormant, is shown by the fact, (of which we lately saw an instance at St. Bartholomew's Hospital,) that cancer of the scrotum may spring up in a chimney-sweeper some twenty years after he has discontinued to carry on his trade.

In the case which we have now to relate, the epithelial cancer sprang up in a locality where it is, according to some accounts, seldom seen; but the occurrence of cancer in such a region is quite in accordance with the fact that growths of that kind are prone to appear in the vicinity of some of the orifices of natural canals, as the penis, pudendum, lip, &c.—localities which are abundantly supplied with follicles. The part affected was actually subjected to a great deal of irritation from riding on horseback, and, possibly, want of cleanliness; but these two circumstances are certainly not rare, and cancer of the anus is not very frequently met with, so that it might be legitimately inferred that in this patient there must have existed a *predisposing* cause, which it is the duty of our modern pathologists sedulously to inquire into. It is likewise clear that there must be, as Dr. Walshe mentions, great confusion between cancer of the *rectum*, and the same disease springing up in the anus. From the notes of Mr. Colby we gather the following details:—

Benjamin M—, aged thirty-eight, coachman, married, was admitted into Abraham's ward, December 10, 1850, under the care of Mr. Simon, with a cancerous growth round the anus. He states that twenty years ago he first noticed a small moveable tumour, about the size of a bean, in the above situation, which has increased slowly in size ever since. The patient was then led to believe that he suffered from piles, and was treated accordingly. About a twelvemonth ago, after hard riding, this tumour became larger, more painful and sore, and after a time it burst, discharging blood sometimes very freely. All the inconvenience was, however, laid to the score of piles, and the patient did nothing to relieve these symptoms until about one month before admission, when he showed it to a surgeon, who advised immediate application to the hospital.

Since the breaking of the tumour, its increase in size had been more rapid, and on examination, a large, hardened, and elevated sore, with everted edges, about four inches and a half long, and three inches and a half broad, was seen, situated chiefly on the left side of the anus. It lay close to the median line, even overstepping it, and extending over the os coccyx behind, and the perinæum in front. There was no extension of the disease to the rectum, and the motions passed quite freely; the mass was perfectly moveable, and did not appear to extend deeply, being perfectly isolated from surrounding textures.

On the 14th of December, the bowels having been previously acted on by castor oil, Mr. Simon completely removed the diseased mass. The patient had chloroform in considerable quantity, and this agent induced perfect anaesthesia; the incision included the skin of the anus, as well as a considerable portion of the external sphincter, and the gap that remained after the incision was truly awful. Mr. Simon, however, brought together the divided edges of the rectum, and the skin, so as to form a new anal orifice, and the whole of the parts were, without much difficulty, placed into good apposition. The hæmorrhage was rather abundant, and the loss of blood, combined with the effects of the chloroform, produced such faintness as needed the administration of wine and cold affusion.

Hæmorrhage in operations about the anus is sometimes alarming; a very short time ago we saw a patient who was with difficulty saved by stimulants of the most potent kind,

being ready to sink under the effects of hæmorrhage which followed the simple operation of dividing the sphincter ani for fistula.

The patient was taken to bed, and ice applied to the perinæum, to prevent further hæmorrhage. There was very little swelling of the parts, and no constitutional disturbance took place; the sutures were not removed until three days after the operation, and then the wound, although it gaped considerably, had a very healthy granulating aspect. No motion from the bowels occurred for six days; and on the seventh day after the operation, as some headache and foul tongue were noticed, half an ounce of castor-oil was given; this operated well, and induced very little pain or difficulty.

The patient progressed very favourably, being troubled occasionally with colic. Some narrowing of the anal aperture took place from the healing of the sore, which was nearly perfect on the forty-second day after the excision. This, however, was easily relieved by keeping a sponge tent in the rectum, and the patient now had a regular motion daily, and acquired perfect command over the aperture of fæcal exit.

On the 6th of February, about eight weeks after the operation, but a very small portion remained unhealed, and a strong solution of the acetate of lead was ordered to be applied, to hasten cicatrization. One month afterwards the sore was quite healed, the anus of its natural size, and the patient experienced no difficulty in passing his fæces. He was finally discharged, about three months after admission, in a very favourable condition.

LONDON HOSPITAL.

Popliteal Aneurism; Compression of the Femoral Artery; Recovery.

(Under the care of Mr. NATHANIEL WARD.)

It has frequently fallen to our share to put upon record cases of external aneurism, in which compression, as revived by Dr. Bellingham, and advocated by Irish surgeons generally, failed to promote the consolidation of the tumour. The want of success was mainly owing, as far as we can judge, either to the irritability of the patient, to imperfect instruments, or to a pressure somewhat too powerfully applied. At last a case of popliteal aneurism has occurred, in which compression, persevered in for a comparatively short time, has been followed by complete success. This is the only instance which has of late come to our knowledge, of favourable results obtained by compression in charitable institutions; but it should be recollected that two cases were lately reported in this journal by Mr. Parratt and Dr. Briscoe, of the Royal Ordnance Hospital, Woolwich, (Jan. 4, 1851,) where compression was followed by the most satisfactory results.

In one of these the tumour was situated at the commencement of the lower third of the thigh, and Bulley's spring tourniquet was applied over the artery *above* the tumour. (In the groin?) The instrument had the advantage of two pads, which were alternated every half-hour the first five days, and then every two hours. Seven days sufficed to stop the pulsation of the tumour. In the second case the aneurism was situated on that portion of the femoral artery where the vessel enters Hunter's canal. The same apparatus, somewhat enlarged, to suit the patient's size, was applied, and, if we do not mistake, remained for thirteen days or thereabouts, when the pulsation of the tumour was much diminished, and three days afterwards there was no impulse whatever in the tumour. The instrument was finally removed three days after this, and the patient discharged twenty-six days subsequently.

It is to be remarked that, in this second case, "the pressure employed at first was such as only to diminish the flow of blood through the artery, but not entirely to impede it; and at each morning visit it was gradually increased, but frequently during the day it had to be relaxed for a minute or so at a time, as the pain occasioned was considerable."

These two cases are extremely instructive, and we will just mention another, which is likewise replete with practical value. It is reported in the *London Medical Gazette* for April, 1851, by Mr. Paget, under whose care the patient was placed. The aneurism was situated in the popliteal space, and Dr. Carte's instrument, with two tourniquets, was used. The patient (twenty-seven years of age, and a surgeon) bore it only nine hours; it was re-applied two days afterwards, and kept "on some point of the artery" for a month. After this date, Dr. Carte's instrument was laid aside, as it gave great pain. Italian tourniquets were substituted, "and when one place grew tender, another was chosen." The patient

remained eleven weeks in bed, and left off the apparatus before the pulsations had ceased; and, strange to say, two months afterwards, they disappeared spontaneously.

Mr. Paget, in the very judicious remarks appended to the case, states, that the aneurism being of the variety called by Mr. Luke the tubular, was probably the cause of the pressure being so long ineffective; and concludes, that he could not advise patients to submit to such a long ordeal, though he renders full justice to the advantages which compression holds out.

Finally, we should not omit to state, before putting Mr. Ward's case on record, that a patient affected with popliteal aneurism is, at the present time, being treated by compression at the Westminster Hospital. We shall not fail to acquaint our readers with the results of this new attempt of putting the new method to a fair test. We offer no apology for giving the following report at some length; the subject is one of great interest, and should be studied with great minuteness.

A healthy-looking and temperate Irishman, aged forty-five years, a lighterman by occupation, came under Mr. Ward's care, on the 6th of May, 1851, with the right popliteal space occupied by a well-defined, strongly-pulsating tumour. The latter was about the size of a small orange, and rendered the posterior boundary of the space convex and prominent, and it likewise caused the integument to protrude internally and externally. In the latter direction, it formed a convexity in front of the tendon of the biceps muscle, which was more marked than in the former. The extent of the tumour was easily defined by the fingers, its surface was smooth, and the sac gave to the touch no evidence of being otherwise than of uniform density. It expanded with each impulse of the femoral artery, and a loud *bruit de scie* was heard with each dilatation.

During the state of distention of the tumour, the right limb measured round the knee, immediately above the upper part of the circumference of the patella, fourteen inches and five-eighths; during its contraction, when the current of blood had been stopped by pressure made on the femoral artery in the groin, the measurement was fourteen inches and a half. The surface of the limb was warmer to the touch than the left, particularly in the neighbourhood of the knee-joint, a little below it. The right leg was somewhat swollen, and measured round the calf fourteen inches and a half; the left gave twelve inches and a half. The posterior tibial artery of the affected limb pulsated less strongly than that of the left. The anterior tibial arteries could not be felt beating over the ankle-joint, from their being in all probability more than usually overlapped by the extensor proprius pollicis. The anterior malleolar branch of the fibular artery, in both limbs, was more than usually developed, and pulsated very distinctly; the right more than the left. Several small superficial veins were observed in a state of distention around the inner part of the knee-joint, and the upper and inner part of the leg. Similar vessels were not remarked in the other limb. The pulse was 60, and regular; the heart's sounds and action normal.

The patient stated that about three weeks prior to admission, "he knelt down for about a quarter of an hour to clean about deck, and found that he could not get up without difficulty, and had a job in straightening his knee." On getting up he detected a small swelling in the ham, which was free from pain for about a week; pulsation in it did not attract his attention. He continued at work on board a lighter for three weeks after the above-mentioned circumstance, continuing to move heavy weights; and for two or three days before Mr. Ward saw him, the patient had been more than usually occupied. His leg had now commenced swelling, and appeared red, and it was on this account that he consulted Mr. John Hewitt, the tumour itself not appearing to have given the patient much anxiety. Mr. Hewitt detecting the nature of the case, at once sent the man to Mr. Ward.

The patient was placed on the middle diet of the hospital, which consists of four ounces of meat with potatoes, five days in the week; on the other two days, of vegetables and soup. The patient was requested to take as little fluid as possible, and the beer usually allowed was omitted. He was kept perfectly quiet in bed for nine days, during which time an occasional aperient was given.

A femoral truss was then applied to the artery on the groin, the pad of the truss being connected to the extremity of the bow by a screw, which could increase or diminish the pressure exerted on the vessel. It acted, however, but imperfectly, and it was laid aside for another, which fulfilled the indications no better. The result, however, of the slight pressure which had been exerted by the two instruments