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Hospital Reports.

ST. GEORGE'S HOSPITAL.

TWO CASES OF EXCISION OF THE KNEE-JOINT, WHICH TERMINATED FATALLY.

By T. HOLMES, Esq., Surgical Registrar to the Hospital.

It is with no intention of depreciating the advantages, or unduly insisting on the risks of an operation, which has now taken its place among the ordinary resources of surgery, that I call attention to the occurrence of two fatal cases of excision of the knee-joint, which have recently occurred at St. George's Hospital; but simply as a contribution to the literature of the subject, which, from the recent adoption of the operation, is at present necessarily scanty. I speak without any accurate data, merely from the impression made on me by cases I have happened to see; but I think that I am correct in saying that this operation has not hitherto proved so successful in the hands of London surgeons as in those of the provincials; and the reason obviously is the greater prevalence of pyæmia in the tainted air and among the enfeebled inhabitants of large towns. This liability to pyæmia must be much increased by the great extent of cancellous bony tissue which is laid open in the operation in question, and possibly by the partial confinement of matter in the deep cavity left after the excision of so large a part. It is with reference to this latter point that the plan originally proposed by Mr. Holt, and again, independently, by Mr. Hutchinson, merits attention; I mean that of making and keeping open a counter opening near the hamstring tendons. Whether anything can be done to obviate the other and more serious source of danger, may be predicted when some more certain knowledge of the intimate changes which constitute the disease of pyæmia is in the possession of medical men. Even, however, if it were clearly shewn that the mortality from pyæmia after this operation is greater than after amputation of the thigh, it might still be fairly argued that the superior advantages of retaining a useful limb justify the subjection of the patient to an increased risk; and I think it will be admitted that the practice of Mr. Jones sufficiently proves that very useful limbs are preserved in favourable cases of excision. The immunity (comparative if not absolute) of children from secondary infection, would render a surgeon doubly solicitous to recommend this operation in those cases occurring in children, in which adequate reasons exist for supposing the bones not too extensively diseased. The question of removing or leaving the patella is one which is still unsettled. I believe that extended experience will shew the propriety of removing it. Of what use is this appendage to the joint when the joint itself is taken away? Even should a false joint be formed, the function of the patella in throwing the line of action of the tendon further forward, and so causing it to act at a greater angle on the head of the tibia, will be abolished by the removal of the condyles of the femur; and we may feel confident that the tendon of the quadriceps will make for itself as good an attachment after removal of the patella, as that of the gastrocnemius does after excision of the os calcis. It will be noticed that, in the first of these cases,

the patella, though to all appearances healthy at the time of operation, was found afterwards perforated by an abscess, which had either formed afterwards, or, more probably, had existed on the surface or in the substance of the bone, but did not then present at its articular surface. The possibility of this occurrence, therefore, should be borne in mind in deciding upon the removal or retention of the bone. The second case is not one of complete excision of the whole of the articulation; it is, in fact, rather a modification or extension of the modern practice of treating abscess in the joints by a free incision into their cavities. This incision revealing a carious state of the lower end of the femur, that bone was removed; the other bones entering into the joint were so little affected, that it was not worth while to remove them. The case terminated fatally, as attempts to save limbs often will, but in the unfortunate absence of a *post mortem* examination (the boy having died away from the hospital, where his death was not known for some time), it is impossible to state the exact cause of his death; the amount of suppuration seemed hardly sufficient to explain it; and, on the other hand, there seemed no active visceral disease.

CASE I. G. P., aged 18, was admitted Nov. 14, 1855, under the care of Mr. Tatum. He had been a patient at this hospital in the early part of the year on account of strumous disease of the knee, which had been benefited by the administration of iodide of iron, and he had been then sent to the sea-side, where his general health improved, but the pain in the joint had increased, and a small abscess formed near the patella, which, however, did not long remain open. At the time of his admission, the ends of the bones were much enlarged, and there was an obscure sensation of fluctuation near the outer side of the patella. He complained of severe starting pain in the joint at nights, and continuous but less severe pain at other times.

It is unnecessary to detail the treatment adopted, which was directed principally to obviate the formation of matter. Small abscesses, however, formed from time to time, apparently unconnected with the joint, and soon healed up again; but the pain and swelling persisting in spite of this treatment, continued for half a year, it was thought better to remove the disease at once, than to wait till his health became further deteriorated. It was determined to try the operation of excision, as the swelling did not extend beyond the articular extremities of the bones of the knee, and the boy (though rather pale and weak) was in perfect general health.

This operation was accordingly performed on May 1st. An H-shaped incision was made; the patella was turned up in the upper flap, but not removed, as it seemed healthy. About half-an-inch in thickness of the end of the femur, and rather more of the tibia, was sawn off. There was not much bleeding, but two or three vessels required ligature. The parts were reunited by sutures, and the limb put upon a ham-splint. The synovial membrane was found greatly thickened, the joint disorganised by suppuration in its cavity, the bones partially denuded of their cartilages and unnaturally vascular (especially the tibia), but healthy where cut through.

The operation was followed by considerable typhoid fever, and by great pain in the part; the discharge was very profuse, and weakened him considerably; union did not proceed very satisfactorily in the wound, the transverse part of which closed, but the rest gaped widely; the granulations were pale, the matters curdy and offensive.

On the fourteenth day after the operation, he was noticed

to have a slight rigor, and complained of pain in the ankle of the sound leg and a little cough. The symptoms of secondary suppuration soon became confirmed; he sank rapidly, and died on the seventeenth day.

On *post mortem* examination the patella was found perforated by a rather large ulcerated opening; there was an abscess between it and the anterior surface of the femur. The cut end of the femur was coated with a grayish layer of lymph, and its cancellous texture, as far as the line marking the junction of the epiphysis, was filled with similar deposit. The shaft was perfectly healthy. The cut end of the tibia was excavated by caries, and its shaft for three or four inches was extensively carious and infiltrated with pus. The popliteal vein was filled with clotted blood and pus, and its lining membrane inflamed and coated with lymph. The femoral and iliac veins also contained pus. The lungs were extensively infiltrated with purulent deposits, otherwise all the viscera were natural.

I am indebted to Mr. Brooks, one of our students, for notes taken of this case during my absence from the hospital.

CASE II. R. D., aged 15 years, admitted under the care of Mr. Cutler, Jan. 5th, 1856, on account of disease of the left knee. He had been a patient of the hospital for about a year, on account of chronic synovitis of that knee, for which he had been treated with blisters, iodine, Scott's bandage, etc. This treatment had produced considerable improvement, and he was made an out-patient; but the pain in the knee had become so severe since he had been moving about, that he was obliged to come into the house again, only a fortnight after his discharge.

There was then much heat of the part, great swelling of the synovial membrane, which contained a large quantity of fluid, and extreme tenderness to pressure. He was kept awake by gnawing pain in the part. He had had occasional rigors. The general health was good, and no strumous symptoms had ever been observed. The knee was punctured with a grooved needle a short time after his admission, and some pus was seen in the serum evacuated.

On the 26th, as the pain in the knee had not been relieved by rest, the joint was opened by an incision of about three-quarters of an inch in length, on the outer side of the patella. This incision, however, did not prove sufficient. It remained open for about three weeks, a discharge of serous pus exuding from it in considerable quantity, when another incision, about twice the length of the former, was made on the opposite side of the joint. This gave some temporary relief to the pain, but not any permanent ease from it, nor did the joint decrease in size, while his health was getting affected, as was proved by his increasing weakness and pallor. Under these circumstances it was necessary to endeavour to remove the disease completely, and with this view it was determined to expose the cavity of the joint freely, and take away any bone that might be diseased, when it was hoped that the disease of the soft parts would subside, a free exit being provided for the large collection of pus. Accordingly on the 17th of April the operation was performed. A curved incision was made, running parallel to the lower border of the patella, which bone was turned back, and the joint opened. The parts around the joint were much thickened and vascular; the lower surface of the patella was slightly carious in one small spot; this was gouged, but as the rest of the bone seemed quite sound, nothing further was done to it. The joint was disorganized by abscess. The lower end of the femur extensively exposed by ulceration of the cartilages, and affected to some extent with caries; about half-an-inch of its thickness was uncovered. The tibia was very slightly affected, and was therefore treated in the same way as the patella, *i.e.* the small part, which was exposed and ulcerated, was gouged, and no further interference attempted. No symptoms followed the operation, which seemed to give complete relief from the pain in the knee. The swelling, however, did not subside, and the discharge, though it became less in quantity, showed no tendency to cease. The boy remained in the hospital for two months,

when, as he was getting obviously weaker and seemed losing flesh, it was decided to send him to the seaside. He remained there for about a month, but got gradually worse, and died the day after his return to London, without any further symptoms, as far as is known.

Hospital Cleanings.

LARGE MASS OF INTRACYSTIC GROWTHS IN THE BREAST, MISTAKEN FOR CARCINOMA: DIAGNOSIS OF THESE TWO DISEASES.

THERE is a case at present in Guy's Hospital, under the care of Mr. BIRKETT, which presents a very convincing and complete answer to the question "*cui bono*", or of what use are microscopic inquiries in cancer of the breast? or of what use is that interchange of medical knowledge between our provincial brethren and ourselves, so long needed, but, it is to be hoped, now fully established, for the mutual benefit of both? The case is that of a young woman who was sent up, some days ago, from Hertfordshire, with a most anomalous growth in the mammary gland. We doubt if nine out of ten surgeons would not put it down at once as a case of malignant fungus hæmatodes of the breast. Many medical persons, according to the details given by the woman's husband, who accompanied her, would not touch it at all. The marks of malignancy were strongly impressed in the history of the tumour, and in its general appearance, which was very much that of a large placenta stuck on the side of the chest. The nipple was healthy, but buried in the granular mass. The woman and her husband, in fact, had made up their minds that her death was only a matter of a few days or weeks. She said that the disease first made its appearance two years ago, as a mere "kernel", in the mammary gland, but did not at that period excite particular attention. It was subsequently opened by a village chemist, poulticed, and "doctored". Something also was said about cancer hospitals, herbalists, marsh mallows, poultices, all essayed in rotation, one after another. But, as might have been predicted, the fungous mass went on growing; and, for about the first time, a series of intracystic growths, so warmly discussed and controverted occasionally at medical societies, was laid open for observation. In fact, the case proved not to be cancer, but one of those intracystic or dendritic formations, as they are called by the German pathologists, which, having burst through the ulcerated or thinned skin of the breast, had subsequently spread as an ordinary adenocoele would spread or sprout, under the skin, possibly, in one direction, and over the surface, as here so singularly manifested. In mammary cancer, Mr. Birkett has long taught the doctrine laid down by Wedl, and referred to by Mr. J. Z. Laurence, that age and vital force determine malignancy. It was a great satisfaction, after the poor young woman had been told over and over again, out of doors, that the case was incurable bleeding cancer, and that she would not survive the pain and bleeding of its being cut out, to assure her, as Mr. Birkett did last week, judging by her age and general health, that it was not cancer, and that (having read of the *éraseur*) he perhaps would not require to cut it with knives, so that there would be no bleeding, and that there was not the least fear of pain or of the cancer recurring. It had none of the microscopic characters of cancer or fungus hæmatodes; though, at a superficial glance, it might be taken for that disease. It was a satisfaction, also, to find that the glands of the axilla were completely unaffected. The woman's general health was also good, if we except emaciation and dyspepsia, caused by the insensible effect of such a disease, as observed by Mr. Hilton, on the general digestive and assimilative organs. This "preying on the spirits" of the disease becomes almost a disease itself, reminding one of the saying in Plu-