intervals between swallowing. His meals, therefore, were very protracted, often over three hours.

In the spring of 1885, he was seen by a distinguished London physician, who diagnosed cancer of the œsophagus.¹ He was then becoming much emaciated. His complexion was naturally pale and sallow, and not unlike the complexion of one suffering from malignant disease. He complained of a feeling of difficulty in swallowing, which he referred to the sternum, about the level of the third rib.

In the summer of 1885, a new symptom appeared. He began to have fluid in the cavity of the abdomen. This was not associated with any tangible change in the liver itself, with any mucous hæmorrhage, with enlargement of any of the superficial veins, or with interference with the free passage of bile. He was then becoming very thin and weak, and was losing the power of taking interest in literary pursuits; there was never any albumen. The ascites rapidly increased, and was associated with some anasarca of the lower extremities; this latter condition was relieved by careful bandaging. The girth of the abdomen amounted to forty-three inches. From the excess of the abdominal fluid, diuretics seemed to be useless.

On December 1st, about half a gallon of clear fluid was evacuated by paracentesis, and from this time the fluid gradually, but surely diminished. All through the illness he had slept well.

Up to December 25th, 1885, he had been nourished almost for twelve months wholly on liquid food, but he had seemed better during the first three weeks of December, since the urine had increased after the tapping. On Christmas Day, 1885, he suddenly fancied, from the improvement in his feeling beneath the sternum, that he could swallow solid food. He had frequently tried to do this before, but always with the effect of rejecting the solid morsel with great distress.

On this Christmas Day, however, he was able to take some solid food at dinner; and, although for weeks he was very slow about it, and had occasional drawbacks if he attempted too large or too hard a morsel, he has continued to take food in the proper form and quantity, and now for six months has been well. All the ascitic fluid disappeared last spring. He gained flesh, was able to walk without dyspnoea, and resumed his full literary pursuits.

In speaking of treatment, it may be said that, as far as it is ever possible to exclude the idea of syphilis from any human being, it was so in this case. The London opinion as to the lesion being malignant was founded upon data that may easily have seemed incontrovertible, except in the one point that the dysphagia was so sudden. We felt that, however probable the diagnosis of malignant disease was, it was possible to give the patient the benefit of the doubt; and, long before the appearance of ascites, we had hoped that the œsophagus was not diseased upon its internal surface, but was pressed upon externally by a gland, either strumous or in a state of chronic inflammation. The appearance of ascites confirmed this belief. It was reasonable to suppose that the same tumour, probably glandular, that was pressing upon the outer part of the œsophagus, was also pressing on the other side on an important channel for conducting the blood from the lower extremities to the heart. It is possible that this may occur in the normal position of the œsophagus and vena cava almost immediately after passing the diaphragm; and, in this relation, it may be stated that the sensation of a patient as to the probable seat of obstruction is not wholly reliable, so much of such sensation being more or less reflex. But the position of the inferior vena cava in the thorax is exceedingly variable. It sometimes bears abnormally towards the left side; and occasionally, instead of ending in the right auricle of the heart, it has been seen to join the right azygos vein. It is, at any rate, highly probable that the cause of the pressure on the œsophagus prevented also some of the return of blood from the inferior vena cava.

The view entertained as to the best chance of promoting recovery was the prolonged administration of iodide of potassium, sometimes with diuretics, sometimes with tonics.

The chief points against the lesion having been malignant are:

1. The sudden access of the difficulty of swallowing solids. There was no gradual notice given of the organ affected; and although, no doubt, much of the constriction was spasmodic, this spasm cannot have been caused by sudden ulceration of the internal membrane.
2. The absence of blood and of mucus from the œsophagus.
3. The absence of pain when the œsophagus was distended by large quantities of fluid.
4. The co-existence of the ascites, showing that the pressure on the œsophagus was external to that organ; in the face of the fact that cancerous glands in the mediastinum are very rare, except as secondary to cancer elsewhere.

¹ This opinion was partly based on the fact that a surgeon, in the endeavour to pass a bougie down the œsophagus, met with an obstruction.

5. It is comparatively easy to diagnose when the illness is over, but we believe the good result of this case was largely due to the iodide of potassium.

A NEW METHOD OF PERFORMING EXCISION OF THE KNEE-JOINT.¹

By HERBERT ALLINGHAM, F.R.C.S.,
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A new method of excision of the knee is a title which may appear surprising, for of the various operations that have already been performed, it might be thought hardly possible that a new one could be suggested. However, not only is it new, but it has, I maintain, many advantages over the methods of excision for knee-joint disease at present in vogue.

The method which I submit to you for criticism and trial I tried several times on the dead body, and having carefully considered every point in the performance of the operation, in May, 1886, I excised the knee of the patient before you. The operation is performed in the following manner. A vertical incision is made over the joint, beginning about two to three inches above the patella, and prolonged over the patella down to the tubercle of the tibia. Above the knee-cap the knife splits the quadriceps tendon right into the synovial pouch above the joint. The soft tissues over the patella are divided to the bone and the knee-cap sawn through, dividing it into two lateral halves; then the ligamentum patellæ is also split down to the tubercle of the tibia.

Now we have the patella divided vertically, each lateral portion having half the quadriceps tendon and half the ligamentum patellæ attached to its upper and lower borders respectively. These halves are then slipped well to the sides of the joint, so exposing the condyles of the femur and the head of the tibia. Divide the crucial ligaments, if these are not already destroyed; then the leg being flexed, push the condyles of the femur forwards on to the tibia and remove a thin layer of bone. Now deal with the head of the tibia by completely flexing the leg on the thigh, and carefully separate the internal lateral ligament from the internal semi-lunar cartilage, which is most important, for this attachment tends to prevent the tibia coming forwards. The tibia is then pushed forwards on to the condyles of the femur, and in order to avoid dividing the lateral ligaments a thin slice is removed from the tibial articular surface with a strong knife or chisel. It is necessary to follow these particulars so as not to interfere with the lateral ligaments.

With scissors and forceps the synovial membrane must be carefully dissected away from the synovial pouch above the patella, and underneath the ligamentum patellæ; in fact, as far as possible the joint had better be cleared of synovial membrane. At this part of the operation, openings for drainage should be made at the postero-lateral aspects of the joint on the outer side, between the ilio-tibial band and the tendon of the biceps, and on the inner side just above the inner hamstring tendons. The best place is behind and on a level with the upper border of the patella, which is the lowest point, and where the drainage-tubes will not be pressed upon by the fibrous structures around the joint. Attention is now turned to the split patella, which, if not diseased, should be left. If only a little of the cartilage is eroded, cut it away with a knife. Should, however, the patella be extensively diseased, carefully separate the quadriceps, the extension of the quadriceps tendon over the patella, and the ligamentum patellæ from the bone; in other words, shell the patella as a sesamoid bone out of the entire quadriceps tendon, without destroying the connection of the quadriceps muscle with the ligamentum patellæ. If the patella is to remain, the halves are sutured together by a strong catgut suture, introduced as advised by Sir Joseph Lister in wiring fractured patellæ—that is, not going through the articular surface with the catgut. If the bone has been removed, bring together with catgut the extension of the quadriceps, which has been carefully separated from each half of the patella.

Lastly, adjust and sew with fine catgut, from the tubercle to the patella, the split ligamentum patellæ; and in the same way deal with the divided quadriceps tendon above the patella.

The skin is then united with separate sutures, and the limb dressed antiseptically.

In pointing out the advantages of this operation, I must ask you to allow me first to allude to a few important anatomical facts. The fascia lata is strong and thick around the knee, and is strengthened by expansions from the biceps sartorius, gracilis semitendinosus,

¹ Abstract of a paper read before the Medical Society of London

and quadriceps extensor, and is attached to the condyles of the femur and the tuberosities of the tibia. The rectus femoris and the vasti are attached, the rectus to the upper part, and the vasti to the sides, of the patella. From these, tendinous fibres pass across the patella, and become continuous with the ligamentum patellæ. In fact, the patella is regarded by many anatomists as a sesamoid bone developed in the tendon of the quadriceps extensor muscle, which is inserted into the tubercle of the tibia. The external and internal lateral ligaments are inserted nearer the back than the front of the knee-joint.

Bearing these important points in mind, I humbly submit that the following advantages will be obtained by operating in this way.

1. The attachments of the fascia lata, the lateral ligaments, and the prolongations of the vasti to the tibia and fibula, are not divided as they are in nearly all the other methods employed; consequently, there is much more support to the joint during the healing process and when the leg is well.

2. Above the patella the synovial pouch is well opened, and all the synovial membrane can be thoroughly removed.

3. Dislocation of the tibia backwards, and tilting of the femur forwards, which commonly occurs after the operation, is thus prevented.

4. The joint and the ends of the bone can be thoroughly examined where in those methods of lateral incisions I can hardly imagine how a good view can be obtained.

5. The undivided quadriceps is a strong antagonist to the hamstring muscles; and, should the splint be left off, the leg is much less likely to become bent.

6. Progression is greatly improved, the attachment of the quadriceps being neither divided nor the muscle shortened, as must necessarily take place when either the transverse, H or V-shaped operation is performed.

7. And, above all, as we hope after excision to obtain movement in the knee-joint, I think the chances of such a result being brought about will be greatly facilitated by the operation submitted to you to-night.

CASE I.—Frederick H., aged 9, a delicate-looking boy. Family history good. Previous history: When five years old, he had scarlet fever, followed very soon after by measles. A short time after the fever, the child complained of pain in the right knee, accompanied with swelling of the joint. He was taken to Guy's Hospital, and attended there as an out-patient for sixteen months. He then went to the country; but the knee did not improve, there being frequent pain and swelling of the joint. A fall greatly aggravated the disease, and the leg became flexed on the thigh. On April 22nd I saw him, and found the joint in the following condition. The right knee-joint was swollen, hot, and tender, the leg being bent so as to form nearly a right angle with the thigh. The tibia was displaced backwards and outwards. The muscles of the leg were wasted; the synovial membrane was thickened, and there was an abscess at the lower and outer part of the joint. The joint was fixed, and any attempt at movement caused the child pain. Measurement around the right knee over the patella, $12\frac{1}{2}$ inches; the left, $11\frac{1}{2}$ inches.

On May 6th I operated in the manner before described, removing all the synovial membrane, which was greatly thickened and diseased; and cut thin slices off the tibia and femur. The patella, being healthy, was left, and sutured with catgut. The split quadriceps muscles and ligamentum patellæ were also sutured, postero-lateral drainage being used.

May 7th. There being extensive oozing, the leg was dressed under ether. Temperature 101.6° .

May 8th. The boy had a restless night; no pain. He vomited, and there was a trace of carbol in the urine. Temperature 101° .

May 12th. Temperature normal, and from that day remained normal. As no discharge came through the dressings, the patient being quite comfortable, the knee was not touched again until May 20th, thirteen days after the first dressing. The wound was then quite healed; so the sutures and drainage-tubes were removed, there being only a little bloody discharge, no pus on the dressings. Antiseptics were again applied.

June 2nd. The knee was dressed again, antiseptics being now discontinued. The openings occupied previously by the drainage-tubes were healed. A small piece of the cicatrix, about the size of a farthing, had slightly broken down; the bones were well united. Side-splints, which had been used, were discontinued, and the ulcer was dressed with zinc ointment.

July 1st. Another part of the scar broke down; otherwise the patient was quite well; no pain; no bone to be felt in probing the wound.

July 20th. He went to the country, the leg being enveloped in a strong leather splint.

August 17th. The knee was quite well, and since that time has remained well. The boy was shown at the Medical Society of London, December 6th.

CASE II.—Alfred T., aged 8, had a very similar history to the former case. His left knee was excised in the manner I advocate. Space forbids me relating the case in full.

Lastly, I wish it to be understood that by this operation I hope the patients may be able to have a movable knee-joint, as this method is specially suited to those cases in which the synovial membrane is chiefly involved.

In the next case I operate upon, I intend thoroughly to remove the synovial membrane, and only dig out with a gouge the diseased spot on the cartilage; I shall not in any way interfere with any of the cartilage that looks healthy.

If the crucial ligaments are not extensively diseased, they shall be left undivided. The joint then shall be kept at absolute rest until the wound has healed, when I shall commence passive motion.

ON THE USE OF STEM-PESSARIES.¹

By J. GORDON BLACK, M.D. LOND., Harrogate.

SEVERAL interesting discussions upon the subject of this paper have taken place in recent years, at the meetings of this Association, and of the Obstetrical Society of London. Not only have they been favourable, in the main, to this mode of treatment, but it has had the advantage of such able and distinguished advocacy as that of Drs. Routh, Wynn Williams, Greenhalgh, and others, who have quoted numerous successful cases in support of their views. Nevertheless, there is a decided prejudice to be noted in some professional minds against the use of these instruments. A gentleman who has just completed his education at one of the largest London hospitals tells me that the teaching there entirely discredits this practice. Not long ago I was consulted by a young lady, suffering from an acutely anteverted uterus, which admitted a fine sound with difficulty. The periods had been increasingly painful, and accompanied by distressing neuralgias and dyspeptic troubles. In my provincial ignorance I advised that a simple stem should be worn for a few months, feeling confident that a cure would result. However, the family doctor, a distinguished London surgeon, when applied to, wrote back to the lady's mother that he would have nothing to do with such a dangerous remedy.

From such an adverse dictum I appeal to a personal experience of fifteen to sixteen years, during which I have constantly and successfully employed stem-pessaries; and, further, let me add that such experience has been corroborated by that of several provincial obstetricians, who have lately expressed to me their continued confidence in the utility and safety of these instruments when properly used.

Now, Sir, I believe that most of this distrust of stem-pessaries dates from a period a few years back, when they were used indiscriminately, and without precaution as to their effects. They were often introduced in the practitioner's house or the out-patient department of a hospital, and the cases not seen again till the next visit. Although, even under these circumstances, many patients did well, yet no doubt preventable mischief resulted to some. The uterus naturally, at first, regards a stem as a foreign body, and some varying degree of resentment is to be expected for a few hours or days. My own rule is to keep the patient in bed or upon a couch for about a week, or as long as there is much hypogastric pain or discharge of blood from the womb. A few hot fomentations with laudanum soon relieve the pain, and the administration of hazeline or ergot keeps the discharge in check. Even where there is no obvious necessity, I believe it safest to insist upon the horizontal position for about a week. This is also desirable for the first two days of several ensuing menstrual periods. Indeed, till tolerance is established, the presence of menorrhagia should induce extra care and rest. Under this head, the paper read before the Obstetrical Society of London by Dr. Routh, December 4th, 1873, is well worthy of study. Were those recommendations carried into practice, less would be heard about the so-called dangers of stem-pessaries.

In regard to the latter, the terror of certain gynecologists is somewhat grotesque, seeing that they do not hesitate to introduce into the uterus the most powerful irritants and caustics, or mould its tissue into new shapes by the boldest plastic operations.

The affections for which I have found stems of most use may be classed broadly under the heads: dysmenorrhœa and flexions. The dysmenorrhœa is evidently caused by a cervical stricture of some

¹ Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association in Brighton.