cut into and the juice escapes over the raw surface of the wound, are not the cells certain to remain and grow, rendering the operation useless as a curative measure? If it is thought desirable to cut into a tumour for diagnosis—say a tumour of the breast—a separate knife should be used, and the incision should be so carefully plugged with sponges that nothing can pass from it into the area of operation.

Fig. 6.—Section through the deep part of the corneal incision, four days old, showing nests of epithelial cells.

In excising the rectum for cancer a cut is often made right through the growth into the healthy tissues beyond, so implanting the rapidly-growing cancer cells into the surface of a fresh wound, where probably some will live and so ensure a recurrence of the disease.

Dr. Little, of Manchester, in vol. iii of the *Transactions* of the Ophthalmological Society, describes a case of sarcoma of the iris; but there were no deep attachments, and he was able to remove it. On examination, it proved to be a pigmented round-celled sarcoma. In the paper Dr. Little also gives references to several other cases of this rare disease.

A CASE OF PERIPHERAL FACIAL DIPLEGIA.

By FRED. W. MOTT, M.D., F.R.C.P.,

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J. T., aged 17, came to Charing Cross Hospital on December 12th, 1892, suffering from bilateral facial paralysis. The following history was obtained. He had measles and scarlet fever when a child, and about two years ago he had diphtheria. He had never any pain or discharge from the ears, nor had he ever suffered from rheumatism. He was an apprentice to the electrotyping business, and up till a month ago he was in good health, when he felt unwell and stayed at home three days, and then went to work again (he had no sore throat). A fortnight later—December 2nd—he shivered, felt ill, and complained of cough and pain in the side. He was attended by a doctor, and got better. On December 7th, when returning home from the doctor's, he noticed that his left cheek was swollen, and he was paralysed on the left side of his face. Two days later he noticed that he was paralysed on both sides, for he could not shut either eye. On December 12th when he came to the hospital, the following notes were taken.

Patient is found to have paralysis of the facial nerves on both sides, the right being rather more affected than the left.

He cannot close the eyes, and smiling and whistling are impossible; in the latter the cheeks alone are slightly blown out. The face is expressionless, and he can neither frown nor smile; the lower lip is everted. On closing the teeth and trying to retract the lips, there is no movement of the right side, but the left upper lip is slightly raised; see photograph taken for me by Mr. V. A. Corbould; the lad was told to smile and close his eyes.

Taste is unaffected, and saliva is freely secreted on both sides. Speech is nasal. To faradism the muscles respond well to a slightly diminished strength of current as compared with normal. To galvanism muscles respond readily on both sides. KCC=ACC. There is no sore throat. The knee-jerks are present on both sides; no ataxy or paresis in any other part; no affection of soft palate; no paralysis of accommodation; no albumin in urine; no discharge from

Case of peripheral facial diplegia; the lad told to close his eyes and smile.

the ears; tympana normal. He was treated with labile galvanism and iodide of potassium with nux vomica, and in three weeks the paralysis had completely passed off.

This evidently was a case of neuritis, peripheral in origin, the cause of which it is difficult to attribute to anything but cold. The only other cause that could be considered as possible is some poison such as the diphtheritic, but the absence of all other symptoms renders this improbable, yet not impossible, when we consider that the lad had had an illness a month previously.

Since both facial nerves and branches eight days after the onset could be excited by the faradic current of even weaker strength than normal, and since the various muscles of expression contracted with a kathodic closure (KCC) of equal strength to the anodic closure (ACC) of the constant current, I was led to give a very favourable prognosis, which was justified by the result.

I considered the cause of the paralysis to be a slight swelling of the nerves as they passed through the stylo-mastoid foramina. As neither taste nor hearing was affected, it may be presumed that neither the fibres which leave the facial to

form the chorda tympani nor the nerve to the stapedius were involved, that is to say, the swelling of the nerves was slight, only sufficient to cause their compression at the stylo-mastoid foramina. It may be inferred that the compression was just enough to interfere with the nerves as conductors of impressions from their nuclear centres, but not enough to produce degenerative changes.

Dr. Gowers says: "Fallopian neuritis scarcely ever occurs on both sides simultaneously, although I have more than once known a second attack on the other side to occur within a few months of the first." The same author says that it occurs but very rarely in diphtheritic paralysis. The other conditions such as syphilis, nuclear paralysis, pontine lesions, and double otitis may be at once excluded. The history and progress of the case point to its being a case of bilateral Bell's paralysis of a mild nature, one side being affected a few days after the other. Whereas unilateral facial paralysis is very common, it is extremely rare for both sides to be affected within a day or two of one another.

DETACHED PIECES OF ARTICULAR CARTILAGE FORMING LOOSE BODIES IN BOTH KNEE-JOINTS.

By W. ARBUTHNOT LANE, M.S.,

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THE following case is of great interest as illustrating one of the modes of formation of loose bodies in the knee-joint and the apparently very slight injury by means of which a large thick piece of cartilage may be separated from the rest of the articular surface of the condyle of the femur. It also shows how very slowly the fractured edge of the pit from which the fragment is removed and of the fragment undergoes change, and how, after a long period of time that edge is bevelled down, and the articular lamella of bone, which had been exposed, becomes covered by a thin layer of articular cartilage.

That a considerable proportion of the loose bodies which we find in knee-joints are developed traumatically is extremely probable, though the fact probably escapes the notice of the surgeon, for the reason that, on the removal of the loose mass, the joint is not usually sufficiently explored. I would also call attention to the locality of the damage which is sustained by the articular surface of the external condyle, and to the exact symmetry of the conditions on both sides in this case.

On examining the articular surface of the external condyle during the varying degrees of flexion of the normal knee-joint I found that the precise spot from which the piece of cartilage was broken could be felt uncovered by bone when the knee was flexed through an angle of 45 degrees, and as the degree of flexion was increased a further area of articular cartilage behind this level was also exposed to possible injury.

If one kneels upon one knee an area of the articular cartilage covering the outer part of the under surface of the external condyle, and which is triangular in shape and includes the locality of the fractures in the case about to be described, comes into contact with the ground, while the internal condyle, part of whose under-surface is also uncovered by bone in this position, is separated from the floor by a considerable interval.

Therefore it is obvious that the injury I am about to describe could have been produced by a blow upon this portion of the condyle, while the knee-joint was in a position of flexion varying from that of 45 degrees to complete flexion, and that in a fall upon one or both knees this area of the cartilaginous articular surface would be struck.

In the case of this patient, although I inquired from him most carefully and on many occasions and also got him to consult his friends, he was not able to give us a definite history of any injury, and he thinks that his knees did not swell or were not rendered uncomfortable till the foreign bodies were felt.

At the same time from experience one knows how readily

a knock or fall is forgotten by people leading such an active, busy, and comparatively laborious life as this patient led.

E. P., aged 25, was admitted into Guy's Hospital under my care on September 25th, 1893, suffering from a loose body in each knee-joint. These caused him pain and inconvenience, with occasional slight attacks of synovitis. He was employed in carrying loads of books to and from London to Woolwich. He was unable to remember having struck either knee, or having fallen sufficiently heavily on his knees to produce pain or swelling, yet he said he might readily have sustained such an accident without his being able to remember it. He was an intelligent fellow, and was anxious to give us any information in his power. About two years ago he experienced a gritty feeling in the left knee-joint, and on examining it he found a body which he could move about freely. About three months ago a similar sensation and movable body were detected in the right knee-joint. On examining the two joints the body in the right one felt more gritty and thick than that in the left. There was some thickening of the synovial membrane and some fluid in both knee-joints. On cutting into the right by means of a vertical incision outside the patella a triangular piece of articular cartilage of the size and shape figured in the diagram was readily removed. It was at once obvious that it must have formed part of one of the articular surfaces of the joint, since its margin was sharply cut, and it appeared as if it had only just been broken. The articular surfaces were carefully examined, and in the outer part of the under surface of the external condyle, and towards its anterior part, was found a space in the articular cartilage including its whole thickness, into which the loose fragment could be readily fitted. Like it the sharp, abrupt margin of the cavity formed by the articular cartilage suggested that the injury was very recent, as it had apparently undergone no change whatever since the injury. In the drawing which was

Fig. 1.—The anterior aspect of the right knee flexed at an angle of 45°. The irregular impression is shown on the condyle into which the fragment, separately figured (natural size), could be fitted accurately.

made for me by Mr. Rowland, the space is shown very cleverly, the upper part of the articular surface being overlapped by a thick swollen synovial membrane. On opening the left knee-joint a loose body of about the same size was obtained. It differed from the other in that its margins were smooth and rounded, and somewhat bevelled; indeed, it resembled exactly the common variety of loose body with which we are all very familiar. On exploring the condyles with the finger nothing abnormal was felt, but on extending the incision downwards, and flexing the joint sufficiently to render the under surface of the condyle visible on the precisely corresponding area of the femur, a depression was found lined with articular cartilage, which was continuous with the rest of the articular surface by a bevelled margin. When exposed the depression was readily recognised by the finger. It was obvious also that its articular lining performed the functions of, and resembled in structure, the general articular cartilage with which it was directly continuous.