

features has resulted in organisms which, comparatively speaking, are conspicuously dissimilar, being regarded and described as one and the same. This specific diagnosis should obviously form the basis of all reliable micro-pathological investigation, in the place of a restless anxiety to publish new and sensational results, however crude—as, indeed, I endeavoured in numerous places for several years to inculcate. To do this is by no means impossible, with competent observation and adequate appliances; and if it continue to be neglected these investigations will remain useless, inconclusive, and misleading.

RESULTS AFTER TWENTY YEARS OF TWO CASES OF EXCISION OF THE KNEE JOINT.

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CASE 1.—Stephen R—, aged twelve, was admitted into St. George's Hospital on Dec. 2nd, 1867. When two or three years old, while running over a grating, his foot was caught and held fast between the bars. The knee was then said to have been dislocated. About a year after this an abscess formed, and opened below the patella. This left a fistulous sinus, through which pieces of dead bone were occasionally discharged. The sinus continued open for six years. A second accident occurred three years after the first, when the thigh bone on the same side was said to have been fractured. The knee had been bent at an angle since the first accident, and the limb had not been properly developed, and a letter from the boy's father stated that Professor Syme had given it as his opinion that the leg ought to be taken off. Three months before his admission a fresh abscess formed and opened on the inside of the knee. This abscess continued to discharge. When admitted the knee was much swollen, and any attempt at motion gave great pain. Excision of the joint was performed on Dec. 12th, 1867. On removing the articular surface of the head of the tibia, the cavity of an abscess was opened, which extended four inches along the shaft of the bone. From this cavity several portions of necrosed and carious bone were removed by means of a gouge. The patella was ankylosed to the femur.

The wound healed satisfactorily, and the discharge from it ceased on Jan. 12th, 1868. A few days after this the patient left the hospital. In July he returned to have a small piece of dead bone removed from the upper part of the tibia. He could now walk firmly by means of a peg attached to the bottom of a lace boot. The shortening from the various causes mentioned was now five inches and a half.

This patient came under observation again this year. The bony thickening about the knee is much greater than usual after excision. He has perfect use of the muscles of the leg and foot, and can walk all day without being tired. The leg is now nine inches shorter than the one on the opposite side. This deficiency is supplied by a patten attached to a lace boot. The lower irons of the patten are convex below, so that one portion only rests on the ground at once, and by means of the foot a rolling motion takes place at each step. In walking it may be seen that there is something not quite natural in the action of the foot; but with regard to the rest of the body there is no limp or peculiarity in his gait.

In this case the great amount of shortening of the limb did not materially interfere with its use, and it need scarcely be pointed out how infinitely preferable the sole of the foot is as a support to any stump that could possibly be left after amputation.

CASE 2.—Edward K—, aged seven, was operated upon on March 14th, 1867, for strumous abscess in the knee-joint. The periosteum was turned down from the sides of that portion of the epiphysis of the tibia which was about to be removed, and care was taken to injure it as little as possible with the saw. No constitutional disturbance, and very little local action, followed the operation. The boy was sent to Margate on May 18th. He was readmitted in 1868. The joint was then movable to some extent in every

direction; the soft fibrous tissue between the ends of bone, and a nodule of bone from the head of the tibia, were now removed; a ham splint and long outside splint were applied. Again no constitutional disturbance followed.

This patient reported himself in November, 1879. He could then walk all day or work all day resting on a light iron patten. The limb was six inches shorter than the one on the opposite side. Flexion and extension of the joint were perfect in walking. There was no lateral motion. This was apparently due to little buttresses of bone having been thrown out on each side of the head of the tibia. The patient was so well satisfied with the results of the operations, that I believe I should certainly have heard of him again had he not been able to go on working as usual.

This case, again, illustrates the great advantage, whatever amount of shortening there may be, of keeping the sole of the foot for the patient to rest upon. The play of the muscles of the leg and foot give a much firmer and more manageable support than any artificial apparatus possibly can. It is, moreover, a self-repairing machine; and this is a point which probably those only can appreciate who have been subject to the constant friction of an artificial limb, and to the necessity of having it frequently readjusted. The case also illustrates the fact that where excision of the knee has not left the leg in a condition to afford a firm support for the body, a second operation may be performed with reasonable prospect of success; and, further, that if solid union should not ultimately take place, a very useful movable joint may result.

THE PERIPHERAL OR CENTRAL ORIGIN OF THE EPILEPTIC AURA.

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OCCASIONALLY I have seen patients who experienced for a more or less indefinite length of time, even for years, without evincing any further manifestation of the epileptic disorder, what afterwards proved to be merely the warning of the epileptic attack, when eventually this was displayed with all its characteristic associations. Under such circumstances, the sole disturbance amounted to a temporary and fleeting loss of speech, or some motor or sensory phenomenon, without any further evolutional change, even of the intellectual centres. When, however, the characteristic train of events diagnostic of epilepsy ultimately became developed, the same manifestation of disturbance was so constantly experienced before each paroxysm that it was interpreted by the patient as its "warning." Apart from this aura or warning which many epileptics complain of, the attack, whether this be of the nature of a petit mal with simple loss of consciousness, or of a fully developed fit with all its motor phenomena, is, as a rule, preceded by no feeling or evident sign of indisposition, physical or mental. Sometimes, especially in the more chronic and inveterate forms of the disorder, we find a tendency to moroseness or irritability prior to each recurrence so marked as to render the companionship or even the presence of the individual intolerable. Frequently I have remarked a state almost amounting to augmented physical and mental vigour.

So far we have failed to determine the organ or organs primarily at fault in producing change in the nervous system more or less general and rendering it so highly unstable. I am, however, inclined to view the epileptic individual as epileptic throughout, so to speak, even to the finger tips, and although the discharge may appear to be spontaneously evoked, yet the conditions favouring its evolution are of gradual attainment. In Russian ball-rooms it has been remarked that if the windows and doors be opened, and the air entering be sufficiently cold, the invisible vapour of the room will be so suddenly condensed that it will forthwith fall as snow. Here we have evidence of a sudden change of state resulting from a coalition of two conditions gradually induced. The same thing will doubtless be found true of the epileptic disturbance, the subjective and objective manifestations of which result from a coalition of two or more favourable states existent in the body alone or the