ACQUIRED SUBLUXATION OF THE KNEE-JOINT IN YOUNG CHILDREN.

By H. BETHAM ROBINSON, M.S.LOND., F.R.C.S.ENG.,
Assistant Surgeon to, and Demonstrator of Anatomy at, St. Thomas's
Hospital; Assistant Surgeon to the East London Hospital for
Children, Shadwell.

DURING the past two years in my out-patient room at the Shadwell Children's Hospital I have had three cases which presented the lesions denoted under the above title. As the condition is evidently a rare one, and I am not aware of any previous reference to such a lesion, I have thought them worthy of being embodied in a short paper. One of the cases, S. C., I exhibited at the Clinical Society in April, 1894, when the diagnosis was confirmed by many present, and short notes of this case appear in vol. xxvii of the *Transactions*.

Before detailing the cases I would lay stress upon the following facts as being common to all, and as giving an indication as to the causes at work to bring about this condition. All three cases were in young female children close on twelve months old, who had all been previously healthy and just getting on to their feet. All suddenly, from some altered condition of health, perhaps associated with teething trouble, got flaccidity of the muscles of the lower extremities and probably laxity of ligaments, and, with the advent of this loss of support, the altered movements in the knee-joints were noticed. In none of the cases was there any evidence of rickets, nor was there any reason to consider the wasting associated with any infantile paralysis.

As will be noticed from the accounts of the cases, a favourable prognosis may be given. With simple internal remedies to restore the general health, and rubbing the leg muscles to increase their bulk and tone, the looseness of the joints soon disappears, leaving apparently no evidence behind.

CASE I.—E. M., aged 9 months, came to my out-patient room on May 12th, 1893. She had always been healthy, and was the youngest of eleven children. The birth was normal. For the past few days the child had been out of sorts and peevish, apparently in relation with dentition. The mother noticed that she had developed some looseness of knee-joints and general flabbiness of muscles, particularly of the lower extremities. On examining the knees, there appeared no deformity. The joint surfaces and patella were normal, and the relation of the tibia and fibula on either side to each other was quite natural. The range of movement in the knee-joint in the antero-posterior direction was not altered, but laterally displacement could be easily effected. On watching the knees, the child is noticed to shoot the tibia and fibula outwards laterally, at the same time rotating the bones outwards, so that the inner tuberosity of the tibia is directed almost forwards, while it occupies the intercondylar notch. The bones are actively returned to the normal position with a loud snap. The child was given vinum ferri, and the knees and muscles were ordered to be rubbed by the mother with lin. saponis. On June 27th, the condition was very much improved. The muscles had recovered some of their tone, and the displacement could not so readily be brought about. The child also was beginning to get down on its feet again. The improvement was maintained, and the child soon got all right. The child was brought up to me for inspection on April 20th, 1894, when her knees were absolutely right, except perhaps for a slight excess of lateral movement. The muscles were bulky and firm, and she could stand and walk well.

CASE II.—S. C., 1 year old, came under my care on February 20th, 1894. She had bronchitis at Christmas. The child before that had been in good health and very strong. Since that time she had not been able to stand down on her feet, and her leg muscles were not as firm as before. There was no evidence of rickets. She was the first child. With the onset of the inability to stand, the mother noticed that the bones of the knee were displaced, returning to their normal position with a loud snap. On watching the child the tibia and fibula on each side were seen to be displaced outwards and forwards, so that the inner tuberosity of the tibia came into the intercondylar notch and looked directly forwards. On manipulation there was some lateral movement but not

as much as in the other two cases. The legs were ordered to be well rubbed with lin. saponis, and iron and strychnine given internally. Up to March 6th the child very much improved but she then developed measles. When next seen towards the end of the month the legs muscles were very flabby, and the looseness of the knee-joints was much more marked. She was shown at the Clinical Society on April 27th, when the condition was easily demonstrated. From this time, as she improved in health, the displacement became less and less noticeable, and when last seen, towards the end of the year, her muscles were firm and strong; there was no displacement to be detected, and she could stand and walk fairly well.

CASE III.—E. D., aged 9 months, first came under my care, October 2nd, 1894. She had always been a very healthy child, and could just stand on her feet but not walk. Three weeks before the first visit she had a fall, and it was after this that anything abnormal was first detected in the legs. When the child moved her knees it was noticed that they now clicked. The only other features worth noting are that the child appeared "out of sorts" after the fall, and her muscles seemed weak so that she could not now stand. The legs, especially the right one, could be easily rotated at the knee joints, so that the inner tuberosity of the tibia came into the notch. This same position could be effected by crossing one leg over the other. Voluntarily the normal position was reassumed with a loud snap. There was also in this case some freedom of movement in ankle joints. A week later the muscles were more flabby, and in consequence the looseness of the joints was more marked. Under treatment the muscles rapidly regained their proper tension, and with this the abnormal movement of the joint surfaces was less and less able to be demonstrated.

REPORTS ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

A CASE OF SPINA BIFIDA CURED BY EXCISION.

(Under the care of Mr. MORGAN.)

[By GERALD R. BALDWIN, F.R.C.S., Surgical Registrar.]

W. B., a boy, aged 2 months, was admitted into the Children's Hospital on June 14th. From birth he had had a tumour in the back. Examination showed the presence of a large and very tense spina bifida in the lower lumbar region of the spine. In size it was nearly as large as a cocoanut. The skin round the base was normal, but that over the more prominent part of the tumour was red, scar-like, and translucent. There was a free impulse between the tumour and the anterior fontanelle, which was widely open. No umbilication was noticed. There was free movement of the lower limbs, and perfect control over the sphincters. No other deformity was present.

On June 14th Mr. Morgan tapped the tumour with a hydrocele trocar and cannula, withdrawing 6 ounces of cerebro-spinal fluid. After the contents had been withdrawn a large gap was perceptible, corresponding to two or more of the lumbar spines and laminae, which were deficient. Next day the tumour was as large and tense as before tapping, but no bad symptoms had followed. Therefore, as no signs pointed to the presence of nerve tissue in the sac wall, it was decided to excise the tumour. Another and stronger reason for adopting this method of treatment was the almost uniformly unsuccessful result which Mr. Morgan has experienced with other methods of treatment. The injection of Morton's fluid and simple tapping have both been tried on several occasions without success. In some cases death has rapidly followed these methods, and in others life has been preserved for only a short time after treatment. Accordingly on the 22nd, after a preliminary tapping, the tumour was excised. The sac wall was formed of skin and