of "all kinds of colours". She was admitted into the hospital, and there had attacks in which, with apparent loss of consciousness, there was general tonic rigidity, but no clonic convulsion. Some of the attacks lasted several hours; others were shorter in duration, and seemed to be excited by a severe cough which troubled her.

CASE XVI. *Chorea; followed some years later by Hystero-epileptic Seizures.*—Ada S., when five years of age, was under treatment, at the Hospital for Paralysis and Epilepsy, for a well marked attack of chorea, from which she recovered, apparently completely. Three years after the chorea, when nine years of age, she became subject to "fits". These attacks commenced with jerking of the head and loss of power of speech for several hours. She was able during this time to hear quite well, but was unable to speak. Then she would suddenly lose consciousness, the jaws "champed", a noise was made in the throat, and "foam" collected in the mouth, almost choking her. There was no general convulsion. After the attack, she generally slept for some time. At one time, these attacks recurred regularly every three weeks. Under treatment, the fits became less frequent and slighter, but there was much jerking of the head after waking in the morning, lasting an hour or more. In the slighter fits she would suddenly fall, be unable to speak for a moment, and rigid; then she would scream, clutch with her hands, and foam at the mouth. There was no cardiac murmur.

CASE XVII. *Chorea in Early Life: Epilepsy in Middle Life.*—John L., aged 50. No history of family neuroses. At ten years of age, he had an attack of chorea; but he had no subsequent illness until forty years of age, when he had a fit, and since that time has had four or five fits a year, always occurring at night during sleep. He does not wake before the fit, but passes into severe clonic spasm, in which he bites his tongue. His heart is healthy to physical examination, but intermits occasionally, not regularly.

CASE XVIII. *Chorea in Early Life: Epilepsy Late in Life.*—A man aged 58 came under treatment for epilepsy of three years' duration. His family history was bad. His father had been intemperate, and his brother died from chronic alcoholic delirium. At sixteen years of age, he had an attack of chorea, of which he could only remember that it was a bad attack and affected both sides. When thirty-two, he had an attack of rheumatic fever, which had left no obvious valvular disease of heart. The commencement of the fits was attributed to insufficient food. They occurred frequently, three or four a week, both day and night, during waking and sleeping, without warning. Consciousness was lost in them, and his tongue was bitten.

These cases illustrate the frequent association of chorea and epilepsy, and they illustrate also several of the ways in which that association is produced. The possibility of a close connection between the two forms of spasmodic disorder is shown in the first case, in which paroxysmal convulsive seizures were part of a severe attack of chorea. In them, although the spasm was in part that of chorea, so intense as to assume a convulsive character, there was also loss of consciousness, and spasm of a tonic character preceding and accompanying the choreoid convulsion. The significance of this case is that the convulsion must be ascribed to the same morbid process as that which was the cause of the chorea.

In the next three cases, Cases X, XI, and XII, we have instances of chorea succeeding epileptoid seizures. In one, a single general convulsion occurred a month before hemichorea; in the other, unilateral fits for six months were succeeded by an attack of general chorea. In these two cases, then, there was no relation to be traced between the distribution of the chorea and that of the convulsion. In Case XII, however, epileptic attacks occurred during almost the whole of life, and were interrupted by an attack of chorea. Both chorea and convulsions agreed in their distribution, and were most severe on the left side. No significance can be attached to the cessation of the fits during the chorea, since it is common for attacks to cease during the course of any acute disease.

In the remaining cases, convulsive attacks succeeded chorea. In Case XIII, chorea, worse on the right side, was succeeded immediately by right-sided convulsions; and it is, therefore, highly probable that the two were the expression of the same morbid change. In Case XIV, permanent epilepsy of marked character succeeded, at intervals of six months, an attack of chorea; and in Case XV, convulsive seizures commenced two years after the termination of an attack of general chorea. In Case XVI, a similar, although rather more distant relationship, was to be observed; while in the last two cases, the interval between the chorea and the epilepsy was so long that probably the only significance is that of a common predisposition.

Several of these cases presented evidence of organic heart-disease; and it may be urged that in this there is a common condition, which

may be a cause of the two sets of symptoms. Heart-disease is common in chorea, and I have found that it is sufficiently frequent in epilepsy to make it probable that there is a causal connection between the two conditions. But such an explanation leaves unexplained the several cases in which no heart-disease could be discovered, and the remarkable association in several of the cases between the distribution of the chorea and the convulsive seizures, which point unmistakably to the origin of the two diseases in a common pathological state of the nerve-centres.

TWO UNCOMMON FORMS OF DISLOCATION.*

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OF the two cases I am about to bring before your notice this evening, one is a dislocation of the jaw occurring during an attack of hysteria; the other is a dislocation of the sternal end of the clavicle upwards. The first is interesting on account of its cause; the second, on account of the rarity of the event.

I was called to see a woman aged 30, said to be in a fit. On arriving at the house, I found her in an hysterical attack, and ascertained that she had received news of a severe family trouble a few hours previously. A curious symptom in the case was, that she violently worked the jaw, and would persist in doing so despite being sharply spoken to and treated freely with cold water. Whilst I was observing her, the jaw suddenly became fixed widely open and displaced obliquely towards the right side. She instantly began to scream violently, and applied her hand to the injured part. I need scarcely say that the hysteria vanished as if by magic. I replaced the jaw in the usual manner, and applied a four-tailed bandage. After being put to bed, she had a return of the paroxysms, and again worked the jaw; but this time the bandage prevented displacement. The next day, beyond a considerable degree of stiffness, nothing abnormal was found. I then ascertained that she had never had dislocation of the jaw on any previous occasion. My reason for recording the case is, that I find no mention made of any similar one either in Hamilton on *Fractures and Dislocations* or in Holmes's, Erichsen's, or Bryant's works on surgery.

The history of the second case is as follows. I was called on September 27th, 1877, to see a grammar-school boy aged 15; the messenger telling me that he had put his shoulder out, having fallen undermost in a scrimmage at football. On arrival, I found him leaning towards the left side and supporting that arm with his right hand, any change of position giving great pain. On stripping the chest, the first sign that attracted my attention was a marked flattening of the left infraclavicular region. I then noticed a depression of the same shoulder; a very distinct prominence in front of the trachea just above the sternum; an absence of the natural projection of the left sterno-clavicular articulation, its place being taken by a depression in which could be felt the empty sternal socket. The tendon of the left sternomastoid was stretched tensely like the string of a bow, and the distance between the shoulder-tip and the middle line was an inch less on the affected side than on the sound one. There was no dyspnoea, and an entire absence of crepitus. My diagnosis was dislocation of the sternal end of the clavicle upwards, as the only accidents which might have simulated it were separation of the epiphysis and fracture; the latter being negatived by the absence of crepitus, and the former by the fact that ossification does not take place in the epiphysis till the eighteenth or twentieth year. Reduction was easily effected by drawing the shoulders backwards and raising the arm. I tied a handkerchief round each arm near the shoulder, and looped them together firmly behind; placed a pad in the axilla; pressed the elbow inwards by means of a bandage round the chest, enclosing the arm; and supported the elbow and forearm in a sling; after which the symmetrical appearance of the chest returned. In the after-treatment, there was a great tendency for the sternal end of the clavicle to slip upwards, as the boy, being unusually active, always contrived to romp about and loosen the bandages as soon as his attendant's back was turned. Although the appliances were continued for three weeks, and a figure-of-eight bandage for a fortnight longer, yet at the end of that time the sternal end of the clavicle remained about half an inch above its usual level; but the functions of the limb seemed to be in no way impaired. The only cases I can find on record of a similar nature are four quoted by Malgaigne, two by Bryant, one by Dr. Rochester of Buffalo, and one by Hamilton.

* Read before the Leeds and West Riding Medico-Chirurgical Society.