A CASE OF ARTHRITIS OF THE SPINE WITH NEUROLOGICAL MANIFESTATIONS.

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ARTHHRITIS of the spine is well known to be a common condition in older people, often giving rise to few or no symptoms. In a small proportion of these there is evidence of interference with the nerve paths: this assumption has been substantially proved in a few cases, but the absence of nervous symptoms in the majority remains to be explained.

Use of the term "spondylitis" is restricted here as it has acquired a certain connotation which is barely justified. The cases on record only present in common, disease, more or less confined to the vertebrae, and differing little from that involving other joints. A possible excuse for the existence of spondylitis as a clinical entity is that the symptoms of root and cord involvement are naturally confined to spinal disease.

The present case is of interest, apart from the comparative rarity of central nervous system damage in spondylitis, in the marked hyperextension of the neck and in its simulation of amyotrophic lateral sclerosis.

CASE.—D. O'R., an unmarried farm labourer, aged 55, entered the Whitworth Hospital under the care of Dr. Parker, on November 27th, 1936, complaining of dragging the left leg when walking, pain in the side of the left hip and general muscular weakness.

About 1925 he began to have a pain or "rumbling" in the crown of his head which would move down his left side to the toes, producing a cold sensation. (On feeling with his hand, patient says the side was cold). This pain would last 10 to 15 seconds and occurred only every few months, mainly at night. It has since got very much worse, to the extent of preventing sleep, and now lasts for half an hour, being the most trying of his pains. Position does not seem to affect it.

In 1928 he first had trouble in passing water, being unable to control the bladder for long. The stream became of poor strength, and urine would dribble away for 2 to 3 minutes afterwards; he rises twice nightly. Despite this incontinence, he is not able to pass water in the company of others, or when excited.

In 1930 he noticed a numbness in his right thumb, finding difficulty in putting on a collar; he said it had a glossy feeling as if a bandage were around it. Within four years it had spread to all the fingers and then to the other hand. Weakness developed in the hands, varying, but gradually getting worse and the flesh wasted, being worse in the right. At this time he also used to suffer from bad frontal headaches.

Since 1931 he has felt some stiffness in his back: at times it is worse in the lumbar region, but it has never been severe nor has it progressed to any extent.

From 1932 a feeling of pain or numbness sometimes passes down the posterior aspect of the arm and along the anterior aspect of the forearm, lasting 10 to 15 seconds; it would at times start in his head, on other days being like a throbbing of the heart. Since 1934 there has been occasionally pain in the suprascapular fossae, especially the left.

In 1935 he had the first attack of pain in the hip; at that time it occurred only when he walked, and would pass down the back of the thigh. It has been getting worse, and now may occur several times a day. He describes the pain as "broadcasting from the hip," as generally the other pains follow.

In the same year he began to drag his left leg and could not keep his
toes off the ground, finding great difficulty in cycling; his legs slowly became weaker and his walking slower. The limbs felt as if they were bandaged, would sweat readily, while the worse leg (left) felt colder. About this time he used to get darts of pain passing along the calf of the right leg to the toes.

Since early last year he has felt pain in the back of his neck on sudden or excessive movement of that part; this is generally on the opposite side to which the head is turned. Holding the head unsupported while the body is semi-recumbent tends to make the neck sore. At times on sudden movement there is a sensation of clicking.

On some days he has had a pain, more like pins and needles, in his right cheek and a similar sensation sometimes passed around the left axilla to the front in the mammary region or around the abdomen from the hip.

During the past year he has been getting steadily weaker, feeling it especially in walking or in lifting things; he also noticed the wasting of his hands, arms and neck. At times he would be free absolutely of pain or discomfort, his only complaint then being the weakness. He took some trouble to explain that most of his sensations were more annoying than painful. Damp weather appeared to increase his discomfort.

In May, 1935, he first sought medical aid, complaining at that time of dragging his leg and having numbness in his fingers; the diagnosis was evidently obscure, and he saw several doctors before entering hospital.

His previous medical history was uneventful, apart from bad teeth, five of which he had removed in 1927 and thirteen in 1935. Previous to their removal he suffered from dyspepsia and vomiting. There was no history of gonorrhoea, and nothing in the family history of note. Sleep had been disturbed for the past few years, due to the pains in his head and hip and the frequency of micturition.

On examination the patient looked old for his age and was of fairly typical pyknic build. When standing his back was rather bent with his head pushed down and forwards, but held vertically; he tended to keep his elbows bent and the fingers flexed. His walking was slow and rather unsteady, dragging his left leg while the foot was markedly plantar-flexed. There was some difficulty in turning, but Romberg’s sign was absent.

The muscles of the shoulder girdle were wasted on both sides, the deltoids and the upper parts of the trapezius muscles especially; the pectorals were less affected; the supraventricular fossae were very deep, showing wasting of the scaleni and levatores scapulae muscles; the arms and forearms were thin; wasting of the muscles in the first interosseous spaces being prominent. Some fibrillation was present. The muscles of the lower limbs were less affected; the left thigh was an inch less in circumference than the right; the left glutei were more wasted than those of the right.

While the muscles of the upper limbs and trunk were weak and flabby, the legs tended to be spastic, but showed little sign of weakness, the patient’s subjective observation of weakness being apparently due to this spasticity. The right leg was slightly colder, although the patient felt the left to be colder.

The skin of the neck was unduly lax and a groove extended down from the inion, while a deep hollow could be felt; the spine of the seventh cervical vertebra was readily found, but those above could not be recognised.

Active movements were free, except for some difficulty with his legs due to the spasticity; the ribs were slightly more fixed than normal. Movements of the neck were a little limited from side to side, and in flexion the neck appeared to move as a whole; the atlanto-occipital joint was free.

The cranial nerves were normal apart from slight horizontal nystagmus and some deafness. The optic discs were normal. Tendon reflexes were increased with positive Babinski’s, Hoffmann’s, and Oppenheim’s signs. The abdominal and jaw reflexes were not obtained.

Co-ordination, even with the aid of sight was very poor in the upper limbs, the pass point on both sides being towards the side of the moving hand; the lower limbs were better controlled, the left being almost normal. Dyssiadokokinesia was present. Joint sensation was normal, except for