

legs kept getting weaker, and he soon noticed them wasting. He thinks his legs have not grown weaker or smaller since the first year of his illness. His general health has been good throughout; the right leg has been stronger than the left throughout. He insists that he could use his legs as well as ever until after his exposure to cold and wet. There is a patch of rather long hair in the front of his right thigh which has grown since his leg began to grow weak.

Present condition.—The upper part of his trunk and upper extremities are well developed, but his lower extremities are little more than bone. He cannot walk at all. His mode of progression is by his hands, his heels being close together and resting against his buttocks, and held there by a strap passing around the legs and over his neck. In this way he is very active, and can go up and down stairs with considerable ease, proving the strength of his arms and upper part of his trunk. He can stand for a short time with the aid of a table. The only support that he gets from his limbs is from the right one. His appearance when standing is peculiar from the great exaggeration of the lumbo-sacral curve, which is due to atrophy and weakness of the erector-spinal muscles as well as of the gluteal muscles. This is noticeable almost to the same extent when lying. The curvature cannot be reduced by pressure, as if the vertebræ had become moulded into this position which would be assumed from the first in order to throw his centre of gravity as far back as possible. When lying also the limbs are rotated inwards. The measurements of the limb are as follows:—

Around left buttock over groin.....	15½ in
“ right “ “ “	17 “
Left thigh, 3 in. below trochanter.....	10½ “
Right “ “ “ “	11½ “
Left thigh, 7 in. “ “	9 “
Right “ “ “ “	9¾ “
Left thigh, just above knee.....	8 “
Right “ “ “ “	8½ “
Calf of left leg at largest part.....	7½ “
“ right “ “ “ “	6½ “
Right and left feet at instep are equal.....	7½ “

Thus while the right buttock and thigh are larger than the left buttock and thigh, the left leg is larger than the right; yet all the muscles are atrophied. The muscles of the right thigh are in the greatest state of preservation, and retain considerable tonicity, especially those composing the quadriceps extensor. The

vastus externus is the largest and hardest of all. All the rest of the muscles of both limbs communicate a dead flabby sensation to the feel. The muscles, flexors and extensors of the left leg, though larger than those of the right, are relatively more atrophied than those of either thigh. The roundness of the buttocks is lost. The spinal muscles are softer than they should be, the right ones more than the left. He cannot stoop nor raise himself from the stooped position without resting his hands on his knees. The abdominal muscles are soft, the left more so than the right. The abdominal walls cannot be kept retracted for any time without fatigue and a sense of soreness. The recti are the tensest when these muscles are contracted. All the movements of the right thigh, flexion, extension, abduction and adduction, are more easily and powerfully performed than those of the left. These movements of the left are done with a flail-like action. It takes considerable force to antagonise the extension of the right limb. Flexion and extension of the right foot and toes are lost entirely while they are feebly retained in the left leg. Fibrillar tremors are noticed on pressure with the finger in all the atrophied muscles, and in those on anterior aspect of thigh without any irritation. He never has and does not now suffer from cramps or twitches in the muscles. The response of the muscles to the galvanic stimulus is proportionate to the degree of preservation of the muscles. On the anterior aspect of right thigh the response is most active. It is less on posterior aspect. On left thigh and leg the galvanic stimulus only produces a slight fibrillar contraction which can be felt, not seen. On the right leg it produces no effect. The right gluteal muscles respond more actively than the left, and the left spinal muscles more actively than the right. The right abdominal respond more actively than the left. Sensation is perfect in the limbs. There is no morbid sensation in the limbs. He occasionally has pain in the abdominal muscles, lasting two or three hours at a time. His limbs become readily cold. His general health is and has been throughout unimpaired. All the organic functions are performed perfectly. He has no difficulty in evacuating his bowels or bladder.

One point of interest in this case is the sudden loss of power independent of any atrophy. The cause seems to have been exposure to wet and cold. I cannot trace any connection between the affection and the kick in the head which he received four years before the onset of the disease.