by a thorough washing with weak carbolic lotion and a large double tube was inserted.

May 20th. The cavity has been regularly irrigated, and there is little discharge.

May 29th. Sinus still open.

June 8th. One and a-half inch single tube still in. Very little discharge.

August 20th. The patient is now quite well.

Surgeons vary in their mode of procedure. Godlee prefers an incision along the costal margin.

A CASE OF THROMBOSIS OF THE ABDOMINAL AORTA.

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ALTHOUGH this case is unfortunately incomplete in some respects, it presents several features of interest, and appears to be worth recording.

R. S., aged 30, a smacksman, was admitted to the Lowestoft Hospital on the afternoon of August 7th, 1895, suffering from total paraplegia and intense pain in the legs and lower part of the back. His previous health was stated to have been uniformly good. About two years previously, however, his wife was an out-patient of the hospital, under Mr. H. B. Walker, for secondary syphilis.

On the afternoon of the day of admission, while walking in the street, the patient was suddenly seized with intense pain in the back and abdomen, and at the same time he felt his legs become powerless. He fell to the ground, but did not lose consciousness.

Aorta laid open from the front showing coagulum.

The following are condensed notes of his condition:

On admission, severe shock, skin cold and clammy, pulse feeble, temperature 97° . Absolute paralysis of motion in lower extremities. Anæsthesia and analgesia of legs, extending upwards as far as the lower third of the thigh on both sides. Above the anæsthetic area there was a zone of hyperæsthesia about 2 inches in width; above this zone the cutaneous sensibility appeared normal. No knee-jerks or plantar or cremasteric reflexes. Patient complained of severe pain in the lumbar spine and in the legs and thighs.

August 8th. During the night he was very restless, complained much of thirst, and vomited once. He had several loose stools, and after 2 A.M. these were passed involuntarily in the bed; the urine, too, dribbled away. Paraplegia was complete, the lower limbs were deadly cold and quite pulseless. There was absolute loss of control over the sphincters

of the bladder and bowel. The anæsthesia seemed to have extended upwards as far as the trunk, but this could not be definitely ascertained, as there was considerable mental confusion. No urine had been passed, but in the evening 1 ounce of turbid, foul-smelling urine was drawn off by a catheter; it contained no albumen.

August 9th. The patient was delirious and very restless all night, but took fluid nourishment freely; diarrhœa was less; no urine was passed. By morning he was semi-conscious, much weaker, and evidently dying, the temperature 97.2° , the respirations hurried and shallow. There was commencing gangrene of the skin of the right calf and of part of the scrotum, and the patient exhaled a strong gangrenous odour. A thin watery fluid was almost constantly discharged from the bowel. The bladder was found to contain only about 1 drachm of foetid urine. He gradually sank, and died just after midnight, fifty-six hours after the onset of his illness. Most unfortunately the relatives refused to allow a *post-mortem* examination, but with great difficulty I obtained permission for a partial examination.

On August 10th, with the assistance of my colleague, Mr. H. B. Walker, I removed the lumbar enlargement of the cord together with the cauda equina. There was no sign of disease of either cord or membranes, and the Clinical Research Association reported that the portion of cord sent them showed no pathological lesions. Then, opening the abdomen, we examined the abdominal aorta. This we found to be occluded by a firm white coagulum for $1\frac{1}{2}$ in. above its bifurcation, extending from a little below the origin of the inferior mesenteric artery downwards into the common iliac artery on either side, 1 in. into the left, and $\frac{3}{4}$ in. into the right trunk. No pathological change was observed in the coats of the vessel itself.

I need not say that I very greatly regret that we were prohibited from making a complete *post-mortem* examination. One would have wished especially to examine the heart and the rest of the aorta and its branches, the remainder of the cord and the brain, and to search for visceral syphilitic lesions. But, as I have said, it was only after a great deal of trouble that we obtained permission for even a limited examination.

REMARKS.—Perhaps the most interesting point in connection with the case is the question of the causation of the paraplegia. It appears probable that the motor and sensory paralysis which occurred was due to arrest of the blood supply to the lumbar region of the cord. A similar condition has been produced experimentally in rabbits (Stenson) and dogs (Astley Cooper and others). It was found that compression of the abdominal aorta for two or three minutes caused complete paralysis of the hind limbs as regards sensation, voluntary motion, and reflex action. In this case it seems probable that, owing to the occlusion of the aorta for nearly 2 ins. above the bifurcation, the direct blood supply of the cord through the lowest three lumbar arteries was arrested. These arteries go to supply the region of the lumbar enlargement, giving rise to the first, second, third, and fourth sacral nerves, and the sacral plexus (formed by the anterior divisions of the three upper sacral nerves, part of the fourth, and the lumbosacral cord) which furnishes the great and small sciatic and the pudic nerves, as well as muscular branches. If, therefore, this part of the cord was suddenly deprived of blood and thereby rendered functionless, it is not difficult to understand the extensive paralysis which ensued.¹

¹ An account of this affection is given by Garland in Pepper's *System of Medicine*, vol. iii.

CANADIAN SANATORIUM FOR CONSUMPTION.—Dr. Edward Playter, of Ottawa, Canada, has established a sanatorium for consumptives at Gatineau Mountains near Ottawa. It lies midway between the Atlantic Ocean and the Great Lakes. Its atmosphere, it is stated, is dry, and remarkably free from germs, owing in summer to the rapid vegetation, and in winter to its sheet of snow. No specific line of treatment is followed, though antiseptic remedies are used in cases in which they appear to be indicated. The locality has been selected on meteorological data as specially adapted for the treatment of phthisis, and will doubtless be of great use to patients in Canada as well as, possibly, to travellers from Great Britain.