

mained unchecked. Its caustic properties may be objected to as being too powerful, and its application may be alleged to be fraught with danger; but in every case in which I have used it, no bad effects have ensued, nor is there reason to apprehend any if the following precautions be attended to; viz., to dry the ulcer or part to be cauterised before applying the nitrate, and afterwards to smear it with oil. For further information relative to the successful application of this escharotic, the reader may consult an excellent treatise on *Diseases of the Tongue*, by Dr. Fleming, in No. xix of the *Dublin Quarterly Journal of Medical Science*, p. 87.

Lastly, the case is of some value, as illustrating the occasional difficulty of forming a correct diagnosis between organic and functional disease of the heart. The "bruit", in this instance, as the event proved, depended on a chlorotic condition of the blood, which had been induced by the long continued ulceration of the throat, and that, too, existing in an apparently scrofulous habit of body. A conception of this peculiar sound may be better conveyed by the word "who", than by any other I am aware of; and though it was somewhat analogous to the "coo" described by Dr. Hope, yet it was essentially different, and could not be confounded with it. It was the most unequivocal and peculiar case of functional simulating organic disease of the heart that I ever had an opportunity of witnessing.

Ballymoney, Ireland, November 10, 1851.

CASE OF FALSE DIFFUSED ANEURISM OF THE ABDOMINAL AORTA, CAUSED BY CARIES OF THE VERTEBRÆ.

By EDWARD DEWES, M.D., Physician to the Coventry and Warwickshire Hospital.

CASE. Edward Russell, a dyer by trade, 35 years of age, came under my care as an out-door patient of the Coventry Hospital on the 21st July 1851.

He was formerly a strong muscular man; but, of late years, having suffered much mental disquietude, he had become very intemperate. He had always been accustomed to hard labour; and in the prosecution of his trade had had occasion to be frequently lifting heavy weights, and had been much exposed to sudden and great alternations of temperature, at times standing up to his knees in cold water, at others working with his back exposed to a large fire, not more than a yard distant. A few months ago, he was knocked down by some drunken men, but was not materially injured; nor did he recollect ever having received any hurt in the back. For the last twelve months, he had been losing flesh; and during the latter five or six, had suffered much from pain in the loins, of a sharp, darting character, coming on at intervals, especially after unusual exertion, and causing him to suspend his work for twenty or thirty minutes at a time. This pain had, for the last week or two, increased so much, as to confine him to bed.

It was now constant, chiefly affecting the left side, and usually of a dull aching character; but at times it becomes extremely severe, darting downwards to the left groin and scrotum, causing retraction of the testicle, and altogether bearing great resemblance to an attack of nephritic colic: no stone was, however, voided; and the urine was uniformly natural, and passed in due quantity. It was at times cloudy, but never had any sediment. The pain in the lumbar and iliac regions was increased by pressure; but there was no appreciable swelling, nor any irregularity of the spinous processes. He was feverish, had a quick irritable pulse, and a teasing cough, attended with slight purulent expectoration, which was, on two or three occasions, streaked with blood. There was great want of rest, so that he scarcely ever slept an hour together.

The treatment was, in the first instance, directed to the alleviation of the cough and fever, and the procuring of sleep by means of full doses of Dover's powder, given at bed-time.

August 1. The lumbar pain had been gradually increasing in severity, and that in the lower abdomen and groins had become constant, and was often exacerbated into violent paroxysms, shooting to the scrotum and down the left thigh. During the whole of August, the power of moving the lower extremities gradually declined, and on the 25th, he was suddenly seized with excruciating pains in the back, groins, and left thigh, attended with strong clonic spasms of the left hamstring muscles, causing the heel to be drawn up close to the nates, and there immoveably fixed. This state continued upwards of an hour, and from that time, all voluntary movements of this limb were lost. A similar spasmodic attack occurred daily till his death; the control over the sphincters, however, remained perfect to the last.

Aug. 26. My friend Dr. Powell kindly visited this patient with me. There was now detected a strong pulsation in the situation of the left kidney; it was single, and tolerably superficial, there evidently being no organ interposed between the finger and the pulsating tumour. The stethoscope discovered a strong, abrupt bellows-sound, synchronous with the systole of the heart.

September 2. On the evening of this day, he experienced another paroxysm similar to that of the 25th August, and more severe than any previous one. It first developed itself in the left lower extremity, and thence extended to the right, giving rise, in *both limbs*, to a state of clonic spasm, of the same nature as that which had on all previous occasions affected the left leg only. He now, for the first time, had some pain in the chest, accompanied with a distressing sense of constriction, and extreme dyspnoea. During the continuance of this state, he became very faint; and, although the pain and spasm remitted, and he got some refreshing sleep during the night, his exhaustion hourly became more apparent, his breathing more oppressed, and he expired at half past nine on the evening of the 3rd September, his intellect remaining clear to the last.

EXAMINATION OF THE BODY, eighteen hours after death, in the presence of Dr. Powell and myself.

There was great general emaciation, and all the organs were remarkably bloodless. On breaking through the sternum, it was observed to be highly vascular, and very soft. The heart was small and empty; the liver

pale and mottled; and the gall bladder distended with bile of a black colour, but there were no concretions or obstructions in the ducts. On removing the liver, stomach, and intestines, we found that the abdominal cavity, on each side the spinal column, was occupied by a large black swelling, which, on examination, was found to consist of a quantity of extravasated blood, lying in the cellular membrane behind the peritoneum, and following the course of the psoas muscles, as far as Poupart's ligament. The muscles themselves were greatly attenuated, and were lying in front of the swelling. The kidneys were pushed out of their usual position, but their texture was perfectly normal. The part of the aorta lying in front of the ninth and tenth dorsal vertebræ, was observed to be slightly enlarged, and its coats were thickened, but it did not contain any coagulated laminæ, nor was there any distinct sac. On raising the vessel, it was found to have contracted strong adhesions to the bodies of the ninth and tenth vertebræ. These bones were nearly destroyed by caries; and the bodies of the eighth and eleventh were similarly affected, though to a less extent. The interarticular cartilages, however, remained intact. Exfoliation to a considerable extent had taken place; and several portions of bone were found amongst the coagula. On laying open the aorta from this point, we observed a circular opening of the size of a shilling, the edges of which were firmly connected to the bones and interarticular cartilages.

REMARKS. The diagnosis of the case now related, in its earlier stages, presented considerable difficulty; for, although the long continuance and the steady increase of the lumbar pain, together with the gradual loss of power over the lower extremities, gave unequivocal indications of vertebral mischief, yet the closest examination failed to detect any appearance of lumbar abscess; and again, the extreme severity of the paroxysmal attacks tended to obscure the true nature of the case, and to lead to the supposition of the existence of some renal complication.

Previous to the 26th August, the idea of aneurism had not been entertained. The pulsation first appeared on this day, and, as far as could be ascertained, was confined to the left side of the spine. It is probable, that during the presence of the spasmodic attack, which occurred on the 25th, a rupture of the connecting medium between the aorta and the vertebræ took place, giving exit to a quantity of blood which gradually forced itself into the cellular tissue behind the left kidney, and gave rise to the pulsation in this situation. A more extended rent probably occurred on the day previous to his death (September 2nd), giving origin to the effusion on the right side, since it was on this occasion that the right lower extremity first became affected with spasm, and the faintness and other mortal symptoms first showed themselves.

It appears desirable that this case should be placed on record, as being an unequivocal instance of aortal aneurism caused by caries of the vertebræ; for, although it might at first be supposed that the aneurism was the primary disease, and had produced caries by pressure upon the bones, yet a nearer examination will show the fallacy of this opinion. In the first place, the calibre of the artery, even

opposite the ninth and tenth vertebræ, was so little increased, that it could scarcely have exerted any undue pressure upon these bones; and that part of the vessel in contact with the eighth and eleventh, whose bodies were also carious, was perfectly sound. Moreover, the inflamed and softened state of the sternum gave further indication of the proneness of the cancellated bones generally to become diseased. Mr. Hodgson, in his work on *Diseases of Arteries and Veins*, informs us, that the carious and corroded state of the bones produced by aneurism is hardly ever attended with exfoliation; whereas, in the case now related, several pieces of exfoliated bone were lying loose among the coagula.

Coventry, November 1851.

HISTORY OF AN EPIDEMIC OF SMALL-POX IN THE MAURITIUS :

WITH REMARKS ON THE PROTECTIVE POWER OF VACCINATION.

By W. H. GARDNER, Esq., M.R.C.S.Eng.

(Read before the *Epidemiological Society*, November 3, 1851.)

HAVING received from the secretaries of the Epidemiological Society a series of questions on the subjects of small-pox and vaccination, I have thought that the best way of answering them would be to give that account which my experience, during a most arduous practice, enables me to do with the most perfect confidence, and yet, I hope, without presumption.

During the month of June 1840, Her Majesty's sloop the *Lily* arrived outside the harbour of Port Louis, Mauritius, having on board between two and three hundred negroes, captured three weeks previously from a slave ship on the Mozambique, or eastern coast of Africa. Small-pox prevailed to some extent on board. Three hundred and forty of these poor creatures were taken from the slaver by the *Lily*; but, before this vessel arrived at the Mauritius, ninety died, many from small-pox, others from rapidly falling into a state of cachexia or atrophy. This great fatality will be easily accounted for, when we reflect upon the crowded state of Her Majesty's sloop, the short allowance of food and water consequent upon that number, the high state of the atmospheric temperature, and the impurities incidental to such a dense mass of people confined in so small a space. The *Lily* was not allowed any communication with the shore, not even to enter the harbour. Great alarm was created amongst the inhabitants, as the disease had not visited the island for upwards of thirty years; a lengthened exemption, which, perhaps, few, if any, of the most favoured climates can boast of, and a striking illustration of the healthy character of the island. The vessel could not be detained, her sailing orders being positive; directions were accordingly given for the instant disembarcation of the unfortunate Africans on board. To meet the necessity of the case, government decided that two hulks should be procured to receive the sufferers; and orders were at