PROVINCIAL MEDICAL & SURGICAL JOURNAL.

CASES, WITH OBSERVATIONS.

By C. M. DURRANT, M.D., Physician to the East
Suffolk and Ipswich Hospital.

(Read, in part, before the Meeting of the Suffolk
Branch of the Provincial Medical and Surgical
Association, May 30th, 1845.)

CASE I.

ANEURISM OF THE ARCH OF THE AORTA; ABSENCE
OF PULSE IN THE ARTERIES IN THE NECK AND
UPPER EXTREMITIES;—DEATH;—INSPECTION.

A gentleman, aged 36, a member of the medical profession, called upon me between three and four years ago, for the purpose of obtaining my advice. At that period his chief complaints consisted of derangement of the digestive organs, with torpid bowels, together with a slight general uneasiness about the chest, and feeling of lassitude, which at times more or less incapacitated him from the active pursuits of practice. He mentioned also, that for some time past, he had been unable to detect any pulsation in the radial arteries. His countenance was sallow, and tongue slightly coated. On examining the chest, I found the heart perfectly normal. At the upper part of the sternum there existed a loud rasping bruit, unaccompanied by impulse. On searching for the pulse, I was unable to detect any in either arm, or in the subclavians, or carotids; in the femoral arteries, the pulsation was unaffected. This absence of pulsation in the arteries of the upper extremities and neck, my patient informed me, had obtained for four or five years. The left ceased first, and was discovered accidentally, when attention being naturally directed to the condition of the right radial, the pulsation in this also, within a twelve-month after the discovery of the former, became gradually weaker and weaker, and at last finally became imperceptible. This gentleman complained of his hands being often cold, but in other respects the circulation appeared to be carried on sufficiently, the veins being well filled, and the arms not having diminished in size.

By prescribing for the digestive organs, and regulating the diet, the more urgent symptoms, for which I was consulted, were completely relieved, and I almost entirely lost sight of this gentleman as a patient for eighteen months. At the expiration of this period, I was requested by his family to visit him as if accidentally, he being altogether worse, at the same time objecting to medical advice. On doing so, I found

him principally complaining of giddiness and defective vision, when in the erect posture. While horizontal, he could see perfectly well; but immediately on assuming the erect position, he became either totally blind, or he still at times possessed an imperfect vision, distinguishing the face, but unable to discriminate the features at a distance of two or three yards. On attempting to walk, he frequently became suddenly blind and giddy. On examining with the stethoscope the upper part of the sternum, to my astonishment, the very loud rasping bruit, which had previously existed, was now not present, and over its former site there obtained a considerable impulse. Percussion over this region did not elicit any abnormal dullness. Severe pains were complained of in the shoulders, clavicles, and especially in the back of the neck, with a slight difficulty of swallowing.

My patient having resolved upon visiting a medical friend in the Isle of Wight, I was very anxious that he should obtain the benefit of Dr. Watson's opinion, while passing through London. He did so, and that gentleman confirmed the diagnosis which I had previously formed, viz., of the existence of an aneurismal disease of the arch of the aorta.

A singular phenomenon presented itself to Dr. Watson, on his examining the arteries of the neck, and which I had subsequently very frequent opportunities of verifying. "I had placed my finger," writes Dr. Watson, "for a few seconds only, in front of the left sternomastoid muscle, when I saw that his head drooped, his cheeks became white, and he was on the brink of fainting; but he recovered immediately. Then I made similar pressure, for a moment, on the right side of the neck, and the same phenomena were instantly repeated, with the addition of convulsive jerking movements of the head and arms. He rallied again directly, upon my removing my finger, and was scarcely aware of what had happened. For a second or two he had been unconscious." I now learned, for the first time, from a near relative of this poor gentleman, that in his earlier years he had been extremely athletic, and accustomed himself to perform feats, requiring very considerable and prolonged physical exertion. I was also informed that about six years prior to my first seeing him, he had been thrown from his horse, and that the animal had rolled upon him. Shortly after the occurrence of this accident he was first heard to complain of occasional pain in his chest.

During his sojourn in the Isle of Wight, and for

some time after his return, these symptoms continued unchanged, varying only in frequency of occurrence and intensity. The attacks of unconsciousness now became more frequent, accompanied by convulsions, and occurred both during his waking and sleeping hours. Seldom a day passed but he suffered more or less from temporary loss of vision, even when in the horizontal posture, distressing him exceedingly, and causing great depression of spirits. A short dry cough, with hoarseness, were now added to the other symptoms. On examining the heart at this period, its action was found to be more feeble than formerly, its sounds diminished, and its impulse scarcely, if at all, perceptible. The appetite remained good, and he gained rather than lost flesh. The bowels were torpid, and relieved principally by enemata.

This state continued for some months, with temporary remissions, during which the invalid appeared and felt considerably better, and was able to take daily out of door exercise. The blindness and insensibility now apparently ceased, and the symptoms which at this period proved most distressing, were a constant short dry cough, with severe pain across the upper part of the sternum, in the neck, and occiput, and down both arms, more especially the left. These pains were frequently of so excruciating a character, that grain doses of the acetate of morphia failed in producing even temporary alleviation.

A new feature now presented itself in this painfully interesting case, viz., paralysis. My patient's health had so far improved as to permit him to attend a case of midwifery, when on the following morning I was summoned to him in haste, and found that on ascending the stairs to breakfast he had fallen suddenly and heavily. The power of articulation, with the use of the lower extremities, were lost; the mouth was slightly drawn to the left side; his expression was vacant, and he smiled continually with the childishness of imbecility. The heart pulsed feebly, but regularly. On attempting to swallow, the most distressing choking sensation was produced, accompanied with convulsions. A state of perfect consciousness returned in the course of four or five hours, after assuming the horizontal posture, on leaving which, however, the above phenomena immediately recurred.

Mr. — now informed me, that unknown to me he had been taking the previous week, powdered nuxvomica, gradually increasing the dose until the time of his seizure, when the quantity amounted to nine grains three times a day.

Succeeding to this attack, there obtained for some days difficult and indistinct articulation, paralysis of the right arm, and inability of mastication on the right side of the mouth.

It is somewhat singular, that during the continuance of these symptoms, the power of vision, equally in the erect and horizontal posture, was unimpaired.

The phenomena above detailed continued, with more or less permanency, until between two and three months prior to the patient's decease. During the latter period he became much emaciated; complained of intense pain, principally across the upper part of

the sternum; had frequent convulsions, and nearly constant recurrence of temporary blindness when in the erect posture. These conditions were also frequently produced by a very severe paroxysmal cough, under which he laboured. The expectoration was very inconsiderable, muco-purulent, and a few days before his death, slightly sanguineous. His digestive organs, hitherto remarkably healthy, latterly failed considerably.

On the day of Mr. —'s decease, June 14th, I visited him at five p.m., when he appeared, and expressed himself as feeling decidedly better; at six o'clock he raised himself from the sofa to cough, when arterial blood flowed from his mouth and nostrils, and he expired instantly without a groan.

Inspection.—Twenty-one hours after death, the weather at the time being oppressively sultry.

The body was much emaciated, the depending parts dark from cadaveric discolouration. The thorax did not present any unusual projection. On raising the ribs and sternum, the aorta was seen enlarged, without protruding prominently forward. On removing the lungs, which considerably overlapped this portion of the vessel, the entire arch was seen enormously dilated, firm, and inelastic, and strongly adherent by adhesive inflammation to the bodies of the second, third, and fourth dorsal vertebræ. The interior of the sac contained more than two thirds its volume of dense organised fibrine, resembling muscle; its lining membrane was osseous throughout, in detached portions, many of which resembled concave shells. On removing the mass, (which was performed with difficulty,) from the vertebræ, the bodies of the third and fourth were found to have undergone complete absorption, leaving the intervening cartilage entire; the left half of the body of the second was also destroyed. The posterior wall of the aneurism was apparently formed by the vertebral canal, in consequence of the gradual absorption of its proper coats, and the great deposit of coagulum. The innominate was slightly dilated; the subclavian and brachial arteries were pervious, but of diminished caliber, and greatly attenuated, the fibrous coat being much softer than natural, and having considerably lost its elasticity. The heart was atrophied, in other respects healthy; the pericardium contained about one ounce and a half of serum. There was no fluid in the pleura; the left lung was slightly adherent throughout, but not firmly; the right side was free from adhesions; both lungs were greatly congested, and their lower edges emphysematous. An aperture capable of admitting a quill was discovered between the aneurism and trachea, around which there existed chronic inflammation of the mucous membrane.

An examination of the head and abdomen was not permitted.

Observations.—On reviewing the successive phenomena of the above interesting case, two or three circumstances appear worthy of notice.

The origin of the disease may, I imagine, with considerable certainty, be dated from the fall from the horse, which the patient experienced six years prior to

my seeing him, and between one and two years previous to the complete cessation of pulsation in the arteries of the upper extremities. The athletic exercises to which he habituated himself must also be regarded in the light of a predisposing cause of arterial dilatation. As a consequence of the fall, Mr. ——— complained of more or less constant pain and uneasiness at the upper part of the sternum, indicating, most probably, inflammatory action of a slow character in the tissues of the aorta. To the effects of this inflammation, I am disposed to attribute the absence of pulsation, which opinion appears to be rendered still more probable, by the existence at that time of a loud rasping bruit over the situation of the arch of the vessel. The early date at which the pulsation ceased is a very remarkable feature in the case, and one of considerable practical value, both in reference to diagnosis, and as illustrative of the length of time during which a formidable amount of disease may, as in the present instance, obtain, the circulation being chiefly carried on by means of collateral vessels. Indeed throughout the whole course of the above case, the influence of the adjusting powers of nature were most strikingly and beautifully exemplified, more particularly in reference to the cerebral circulation.

The cessation of the loud rough bruit, which originally obtained at the upper part of the sternum, and the occurrence of considerable impulse over and to the right of this spot, where no impulse formerly existed, are also points of much interest. By these phenomena were indicated a smaller amount of resistance to, and consequently less vibration, in the column of blood flowing through the arch of the aorta, together with a probable deposition of the fibrinous part of the fluid,—these circumstances combined giving rise to the impulse, while they equally prevented or rendered indistinct, the previously existing morbid sound.

The loss of vision, together with the paralysis, under which this poor gentleman laboured, can only be regarded as the effects of an impeded and irregular circulation through the brain. After it became known that Mr. ——— had for some days taken *nux vomica*, a question was mooted, how far the symptoms might depend upon the physiological action of that drug. I confess that I am not disposed to attribute any of the phenomena which presented at that time to the influence of this medicine. Much rather I think may the paralysis be ascribed to the fatigue attendant upon an anxious case of midwifery, acting, as it must have done most powerfully, in depressing the energies of a brain insufficiently stimulated by arterial blood. The temporary imbecility and childishness of manner, which from time to time occurred at one period of the case, induced me to suspect, in conjunction with the feeble action of the heart, that a degree of softening of the brain had taken place. Notwithstanding that no opportunity was permitted of examining this organ, I now fully believe that it would have been found healthy, and that this condition, which occurred at one period only in the course of the disease, owed its origin to a similar cause with the paralysis, viz., a disordered circulation in the vessels of the head.

The treatment of the case throughout was chiefly palliative, directing especial attention to the condition of the digestive organs, and at the same time removing by leeches and mild mercurials those attacks of local congestion which in diseases of an organic nature, seated in the organs of circulation, so frequently recur, and so invariably aggravate the distress of the sufferer.

It was constantly remarked that Mr. ——— complained more, and felt altogether worse, under the circumstances of an easterly wind, and an atmosphere highly charged with electricity.

CASE II.

ENLARGEMENT OF THE LIVER, SIMULATING PLEURITIC EFFUSION.

Sarah Best, aged 11, presented herself as an out-patient at the Ipswich Hospital, in February last. About twelve months prior to her application, as stated by the mother, the child was attacked with fever, pain in the right side, over the region of the liver, and a dry cough; shortly after which the side became gradually enlarged, in which state she remained to the date of her admission. On examination, a visible enlargement was evident on the right side, from the fourth rib downwards, and which, on admeasurement, exceeded considerably that of the left; (the exact difference was unfortunately mislaid;) the intercostal spaces were not obliterated. Countenance tolerably healthy; tongue slightly coated; papillæ prominent; pain in the side inconsiderable; inability of lying upon the healthy side; bowels sluggish; evacuations sometimes, although not constantly, clay-coloured; spinal column perfectly straight. On percussion, the left-side, both in front and behind, yielded its natural resonance; the same result obtained upon the right side from the clavicle to the fourth rib, below which the dulness was complete to a line about one inch below the margin of the false ribs, at which spot the edge of the liver was clearly definable. Over the back on the same side, percussion yielded a clearer sound than in front, but dull on comparison with the left side. The respiratory murmur was clear over the entire left chest; equally distinct and somewhat exaggerated on the right side from the clavicle to the fourth rib, below which line it terminated abruptly, and was inaudible; posteriorly, on the same side, the natural breath-sound was but slightly affected. On examining the impulse and sounds of the heart, this organ was found to have undergone displacement upwards.

The treatment consisted in the prolonged exhibition of mercury, twice blistering the side, the iodide of potassium internally, and latterly, in addition, the compound iodine ointment externally.

Under these measures the liver became gradually reduced in size, permitting respiration to be heard in front almost to its natural extent. Before the organ, however, had quite regained its normal size, the patient discontinued her attendance at the hospital, and the case was unfortunately lost sight of.

Observations.—The diagnosis between enlargement of the liver, and chronic pleuritic effusion, is not always readily effected. In the above case, it will be seen that we have in many points common—to wit,

the enlargement and pain in the side, the short dry cough, inability of lying upon the healthy side, the dulness on percussion, together with the absence of breath-sound in the lower part of the lung. On the other hand, the existence of the respiratory murmur in the lower lobe at the back, in consequence of this portion being situated behind the liver, while in front, the dulness and absence of breath-sound were complete; the negative effect on the physical signs by change of posture; the clearness of respiration above, and the non-existence of intercostal displacement furnished the chief indices upon which to frame a differential diagnosis.

It was interesting to remark, on the diminution in the size of the liver, the return of the heart to its normal position.

CASE III.

PURULENT DISCHARGE FROM THE BOWELS; PULSATING TUMOUR IN THE ABDOMEN: TREATMENT BY THE OXIDE OF SILVER.

A female, aged 40, came under my care at the Ipswich Hospital, with the following symptoms:—She stated that shortly after her confinement, she was the subject of considerable hæmorrhage from the bowels, sometimes during the natural evacuation, and occasionally per se. This discharge, occurring repeatedly at variable intervals, and continuing unrelieved for the space of two years, materially reduced her strength, at which period it became changed from sanguineous to purulent.

On admission, she said that the "corruption," as she termed the discharge, had existed for the previous six months; that she suffered frequent pain about the region of the sigmoid flexure of the colon; felt occasionally sick, and often faint. Her countenance was sallow, and anæmic; tongue clear; appetite moderate; bowels very sluggish; urine natural; skin very dry and harsh, with patches of chronic eczema about the wrists. On examining the body pain was produced by pressure, both in the hypochondriac and epigastric regions. In the situation of the pancreas, a tumour about the size of a small orange, was discovered pulsating synchronously with the aorta, and over which was audible a moderately loud but soft bellows-murmur. The intestinal discharge was distinctly purulent.

Various remedies were prescribed for six weeks, including salines, warm baths, a mild course of mercury, sulphate of zinc, counter-irritation, &c., all of which benefitted, but did not cure the disease. The oxide of silver was then given in half-grain doses three times a day, with one grain of the compound ipecacuanha powder, and steadily persevered in for ten weeks, when she reported herself well, and free from discharge.

Observations.—This preparation of silver, more especially brought before the notice of the profession by Mr. Lane, I have found extremely useful in many gastric and duodenal affections. It appears to be especially indicated in cases presenting a clean but flabby tongue. In cases also of amenorrhœa, chlorosis, and anæmia, complicated as they so frequently are with morbid sensibility of the gastric nerves, the oxide of silver appears to fulfil the best intention prior to the

exhibition of the preparations of iron. The tumour of the abdomen in the above case, although in many points strongly simulating aneurism, depended, I believe, upon disease of the pancreas or mesentery lying upon, and transmitting the pulsations of, the abdominal aorta.

This opinion I was led to infer, after repeated examination, from the following circumstances:—

1st. From the history and symptoms of the case, and general appearance of the patient.

2nd. From the soft short character of the blowing murmur, on the application of the stethoscope.

3rd. From the possibility of nearly suspending both impulse and murmur by laterally pushing the tumour off the artery.

The patches of chronic eczema were completely cured by the application of the iodide of sulphur. I may here mention the great amount of benefit I have seen derived from the use of this preparation in the form of ointment, in the treatment of this often very chronic and obstinate disease. The strength of the ointment has varied from fifteen grains to two scruples of the iodide of sulphur to an ounce of lard.

ON THE VALUE OF URINARY DIAGNOSIS IN THE DETECTION AND TREATMENT OF DISEASE.

By EDWARD JAMES SHEARMAN, M.D., Rotherham.

(Communicated to the Anniversary Meeting of the Provincial Medical and Surgical Association, at Sheffield, Thursday, July 31st, 1845.)

Presuming that the members of this Association are fully acquainted with the chemical and microscopical properties of healthy urine, I take the liberty of mentioning a few points in practice, which I have found exceedingly useful in enabling me to detect, more easily than usual, the causes of some obscure cases of disease.

To avoid taking up the time of the Association by any introduction, it is just necessary to premise, that my own view of the action of the kidneys is, that of *safety valves* to the rest of the secreting organs; when they are disorganised, most diseases become much more unmanageable.

The urine ought to have an acid reaction on litmus paper—from the phosphoric acid liberated by the combination of uric acid with the phosphate of soda and ammonia, derived from the food. If, therefore, the urine is alkaline, it is unnatural; unless the person has lived long exclusively on vegetable food. The specific gravity of the healthy urine of twenty-four hours ought to be about 1,029.

By detailing the history of a few cases which have appeared to me rather rare and obscure specimens of disease, I do not in the least presume to dictate the best mode of treatment, as I have not yet had sufficient experience to enable me to decide. But it must be gratifying to any practitioner of medicine to be able to detect even the nature of an obscure disease, although, as will often happen in such cases as the following, the broad outline of treatment does not prove entirely satisfactory.

In children, from six months to six years of age, it