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RETROSPECTIVE ADDRESS READ AT THE FIFTH ANNIVERSARY OF THE READING PATHOLOGICAL SOCIETY, JULY 8th, 1846.

By F. A. BULLEY, Esq., F.R.C.S., Surgeon to the
Royal Berkshire Hospital.

(Continued from page 439.)

At the tenth meeting—Mr. Harrinson related a case of a woman, aged 56, a dispensary patient, who had exhibited symptoms of severe cardiac disease, which she stated had existed for nearly twenty years; she had had two severe attacks of rheumatism; general œdema; she died of coma and apnoea. The principal physical signs were a double bellows-sound of peculiar characters; the first like the feeble cry of a guinea fowl, the second resembling a musical note. On inspection after death, besides congestion of the lungs, and adhesion of the right lung to the pleura, the right cavities of the heart were found to be small, the left enormously enlarged, the mitral valve extensively diseased, the aortic valves incapable of closure. He made this to account for the double bellows-sound during life.

Dr. Cowan said he thought there was a regurgitation of the blood through the aortic valves, and the roughness of the aorta would give double bellows-sound of the most intense character, which would have been heard under the clavicles, and in the great arteries of the neck. The regurgitation and want of elasticity in the arch of the aorta were sufficient to account for the hypertrophy and dilatation of the ventricle, and perfectly explained the symptoms.

Your reporter exhibited an apparatus which he had lately constructed for the more efficient treatment of fractures of the thigh bone. The mechanical extensile power in this apparatus, by means of a foot piece moving on an endless screw, was so arranged, that the necessary traction should be equally divided between the foot and the lower end of the fractured bone, because he had found that in many of the cases he had witnessed, where the extension had been practised wholly by the foot, the knee-joint, from its having been kept for a long time upon the stretch, had remained inflexible and useless long after the bone had been united, which constituted, he thought, a serious objection to this method of treatment, and also because it was thought by some parties, that traction employed only through the medium of the broken bone itself, would be a better mode of treating these accidents. But he could prove, that to produce the necessary extension in this way, a greater amount of extending power, owing to the shorter leverage

employed, would be necessary; and to obtain this, the pressure upon the thigh above the condyles would interrupt the venous circulation, and cause œdema of the leg, which, when traction was used in this way, and especially by the apparatus of Dr. Jarvis, was placed on a double inclined plane, in a depending position. He therefore proposed to remedy these inconveniences by a division of the tractile forces, so that half should be expended upon the thigh-bone itself, and half upon the foot. The peculiar mechanism of the apparatus would ensure these effects. He particularly recommended it, as it was capable of ensuring an easily regulated extension, while at the same time the broken limb was constantly under the observation of the surgeon, which was not the case with Liston's, or indeed any of the splints in ordinary use. He would apply this mechanism to all cases of fracture of the thigh, in whatever portion of the bone they might occur; and in order that the traction of the lower broken end of the bone might be made in as direct a line with the upper end as possible, he would suggest that the foot with the whole limb should be kept more or less raised during the process; for instance, if the bone was broken near the trochanter it would be necessary to raise it very greatly, while on the contrary, if broken near the condyles of the bone, a very slight elevation would be sufficient, or perhaps none at all would be required. The lateral splint, in connection with the upper part of the apparatus, was acted upon by a force which pressed it inwards towards the thigh, thus preventing the bowed or excurved appearance of the limb, which occasionally followed these accidents.

Mr. May said, that in the majority of cases which had occurred to him, the straight splint of Liston seemed the best to be adapted to the treatment. The rule which guided him was to place the limb in that position at first, which seemed best to suit the apposition of the broken bones. In all cases of fractured thigh he considered it best not to be in a hurry to put it up. He generally placed his patient in the easiest position on the side, and having placed the ends of the fractured bone in apposition, left it for a week or ten days, until the contractility of the muscles had subsided and the inflammation disappeared. He then, having carefully enveloped the limb in several folds of bandage, so as to prevent the injurious effects of pressure, applied the straight splint, and lashed the limb to it, and it rarely, if ever, required to be touched afterwards. He then placed the patient on the revolving bed, especially if he was an old person, to prevent the sloughing which might probably ensue.

On the same evening your reporter read a short paper on some of the disadvantages which he considered to attend the flap operation for amputation. He thought it was a much more painful operation than the circular one, and that in the aggregate it took a longer time in its performance. More painful, from the greater extent of the integument divided, and from the oblique incision of the nerves, and longer in performance from the oblique section of the vessels, rendering them unable to collapse, and thus, with a greater difficulty in securing them, a greater number of arteries required ligature. An eminent surgeon in London had mentioned to him, that he had been obliged to apply twenty-five ligatures after a flap operation, in which there was reason to believe, that had the circular method been employed, three or four might have been sufficient.

Your reporter thought this necessity had arisen from the oblique section of the smaller arteries preventing their collapsing in contradistinction to their retracting, which he believed was not the cause of the hæmorrhage stopping after amputations. He believed that arteries under a certain size were, from the absence of a muscular tunic placed under the same circumstances as veins, and were equally capable of collapsing when transversely divided. What was generally thought to be retraction, he believed was nothing more than the severed muscular fibres round the collapsed vessels contracting, and covering, and thus obscuring their ends. If the power of retraction resided in the arteries, *per se*, by reason of their muscular construction, why did not the large arteries, which were composed of a distinctly muscular coat, retract for the stoppage of hæmorrhage, as well as small ones, in which latter a muscular envelopment was scarcely discernible. The larger arteries needed a ligature he thought, simply because the density of their muscular tunic prevented their collapsing, which was not the case with the smaller ones, which were only prevented from doing so in the flap operation, by the oblique method of division to which they were subjected. In the original paper he had introduced a hypothetical argument to account for the secondary venous hæmorrhage which sometimes ensued after flap amputation, but would not recur to it now, as he was anxious not to take up the time of the Society without a definite practical object.

Dr. Bradshaw had seen an operation performed at the Westminster Hospital, by one of the surgeons, when the flap section was used, and more time and blood was lost than by the circular operation, and secondary hæmorrhage followed, and it was the opinion of all present that the flap operation was, generally speaking, not preferable to the circular one.

Mr. May said, that he thought the observations of your reporter, as regards hæmorrhage, not very just, but that he believed we were not in a condition, from the statistics of surgery, to come to a conclusion on the subject. The pain he did not consider a matter of much importance. The section of the vessels, in turning back the skin in the circular mode, was objectionable, as dividing the nutrient vessels on which union depends, which he believed to be both practically and theoretically injurious.

At the eleventh meeting—Mr. May presented a

specimen of diseased stomach, taken from a lady, aged 42, who, just before his visit, had vomited three pints of blood, and in the evening a similar quantity; a large quantity of blood was also passed by stool. On examination after death, the stomach was apparently healthy, but attenuated; an ulcer was discovered near the cardiac extremity, on its under surface, with a vein distinctly opening into its centre, which could be easily inflated with a blow-pipe introduced into the vessel. She had suffered from pain of the epigastrium, extending to the back before the hæmorrhage. She died of hæmatemesis and melæna. The uterus was hypertrophied, but whether from recent abortion or not, he could not say. He had not seen the patient before the attack.

Mr. J. Workman then read his promised paper on a case of ascites. The patient had been both an in and an out-patient of this hospital. He had used two grains of the iodide of potassium, in broom tea, with squills, or decoction of dandelion, or spruce fir, three times a day, and in a short time the abdomen became empty. The patient had been tapped three or four times previously. She had had several returns of the complaint since, but it was always removed by the same means. Mr. Workman attributed these effects to the hydriodate of potash, as he had tried the other means detailed without it, but without success. The narrative of this interesting and instructive case gave great satisfaction.

At the twelfth meeting—Mr. Walford related the case of a boy, 12 years old, who had died under very obscure circumstances. On examination after death the heart was found to be small, but the pericardium was found to be greatly distended, so as to be capable of containing about a pint of purulent fluid, which was discovered in its cavity. Adherent to its inner surface were masses of coagulated lymph. The pericardium itself was also thickened. The patient had never had rheumatism. He had been ill two days when Mr. Walford first saw him. In the course of the case he became affected with a loose cough, and a pain in the left side, but there was apparently nothing abnormal in the state of the lungs. There was so much tenderness that he could scarcely bear the ear applied to the cardiac region. Mr. Walford remarked that the disease had come on very unexpectedly, and that, prior to his having been seized with the acute symptoms, the boy had not been unhealthy.

Mr. Walford cited the opinion of Dr. Hasse from the last volume of the works of the Sydenham Society, which went to prove that different grades of inflammation of the pericardium produced different effects; that in some cases a gelatinous substance was poured out, and that the organization of this substance produced the adhesions which were sometimes observed in this disease, and also that effused pus, if not in too large a quantity, might be absorbed.

Dr. Cowan said that he had seen two cases of chorea in which there was coexistent inflammation of the pericardium, but in which he had failed at first to detect it. The disease was characterized by a peculiar to-and-fro motion or friction sound. In these cases the chorea had subsided on employing treatment for the pericardial disease. He had seen many cases where there was great difficulty in deciding whether

there was disease of the pericardium or not. Cases had been related by Dr. Bright and others where the chorea was connected with pericardial affection.

Mr. Harrison related the case of a child, born rather above the natural size, and of healthy appearance, with an imperforate anus. The bowels had not been moved since birth, and several doses of castor oil had been given without effect. The child had been seen by another surgeon, who had endeavoured to open the intestine, but failed, the knife having passed between the bladder and the rectum, where a quantity of effused blood was discovered after death. The child having been left to his fate, Mr. Harrison saw him on the third day after his birth, when the abdomen had become enormously distended, as also the hypogastrium. He was continually straining or bearing down in the effort to evacuate the bowels. On examination the finger passed readily, for the space of an inch, in the natural tract of the gut, where there was a *cui de sac* projected by the accumulated meconium, which now presented a ready mark for the knife. Mr. Harrison succeeded in making a puncture in the most prominent part of the swelling, by which a large quantity of meconium was suddenly discharged, with some air. An immediate collapse of the abdomen followed the operation, but the child sank within an hour afterwards. On examination after death, the bladder was found to be adherent to the rectum, and a quantity of blood effused between them, as also between the rectum and the cavity of the pelvis. The knife in the first attempt had probably passed between the bladder and the rectum.

Your reporter took occasion to remark that the operation might have been more difficult at first, on account of the intestine not being distended by the meconium as afterwards occurred, and that the surgeon who first attended the case, was not so obnoxious to blame for an unskilful operation as the narrator seemed to think he was, because it was well known that these operations, performed while the intestine was not distended in the early periods of infantile life, generally failed, from a want (as Mr. Harrison had observed,) of a mark to guide the operator. He, however, concurred with Mr. Harrison, that great blame was due to the first attendant for having left the case to die, without calling in another opinion. It was observed that there was an opening into the rectum, but whether it was occasioned by the knife in the *post-mortem* examination, or by ulceration, the narrator was unable to say.

Mr. May then related the case of Mrs. Bennett, whose arm he had removed for a cancerous disease, following an extensive burn, and exhibited the heart and gall-bladder which he had removed from the patient. The accident had occurred fifteen years ago, from her having fallen into the fire in a swooning fit, to which she had been some time previously subject. She was the elder sister of the family, but all the other members of it were apparently free from cancerous disease. After the operation the stump progressed favourably, and had nearly healed. The disease, which was at first of a scirrhus nature, however, returned in the stump. Latterly she had complained of pain in the thorax, especially on the left side, in the region of the heart. She had also occasionally suffered from hæmoptysis, which continued till her death. On

examination, both the lungs were found to be equally and generally infected by scirrhus tubercles. There was a large mass of scirrhus formation in the left side of the anterior mediastinum. The uterus contained a scirrhus nodule in the anterior part of its substance, and another in its cervix. The heart was tolerably well developed. The walls of the right ventricle were occupied by a mass of the same kind of scirrhus formation, so as to make that side of the organ appear much larger than the left; it was deposited in the muscular tissue of the ventricle; there was nothing, however, particular in the cavity of the ventricle; the left side of the heart was perfectly free from disease. The gall-bladder, which, with its contents, was exhibited, was of a pale white colour, and contained no natural bile, but a quantity of turbid thickish serum, resembling pus, with a number of white concretions in it, one of which blocked up the ductus cysticus, and prevented any escape of the contents of the bladder. The concretions were very little different from what are usually observed in such cases, but appeared to be composed of a softish calcareous substance, probably cholesterine, covering what appeared to be a layer of coagulated blood.

Dr. Cowan, in conclusion, made some very interesting remarks on the pathology of cancer, especially as regarded the apparent metastasis of the disease to the heart, after an operation in other parts. He detailed at large the account of Cope's experiments on the transfusion of cancerous matter, which had lately been denied, and also offered some ingenious and learned reasoning on the course of scirrhus cachexia, which were listened to with great interest.

Mr. President and Gentlemen,—Having now brought my labours to a conclusion, allow me to thank you for the kind and indulgent attention you have given to my somewhat tedious recital; but I trust that I have not extended my remarks beyond a useful limit, and I also hope that I have not omitted anything of consequence which during the past year has been presented to your notice. If I have done so, it has been from inadvertence, not from design. I cannot conceal from myself, nor from you, that I have derived great advantage from performing the duty your kindness has imposed upon me, inasmuch as the nature of the task has made me more intimately acquainted with the opinions and thoughts of my colleagues and medical friends, which may be of service to me in the future exercise of my profession.

CASES OF CONGENITAL MALFORMATION OF THE BLADDER.

By EDWARD DANIELL, Esq., Surgeon, Newport Pagnell.

(Read at the Anniversary Meeting of the Provincial Medical and Surgical Association, at Norwich, Thursday, August 20th, 1846.)

The beauty and order of nature is at all times a fruitful theme of admiration to every investigator into its deep and hidden mysteries, and very rarely is it the lot of the philosopher to detect errors in its steady and uniform developments. There are, however, from causes, occult and incomprehensible, occasional departures from this harmony and correctness,—departures which set at naught all our reasonings