ASSOCIATION MEDICAL JOURNAL:

BRING

THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

No. CXCVI.

LONDON: SATURDAY, OCTOBER 4, 1856.

Hospital Reports.

YORK COUNTY HOSPITAL.

LARGE SALIVARY CALCULUS: TAPEWORM.

By W. D. HUSBAND, Esq., F.R.C.S. Eng., Surgeon to the Hospital.

HENRY PAWSON, aged 46, a healthy looking agricultural labourer, was admitted under my care, August 30th, 1856, for a tumour in the mouth. He stated that the tumour had gradually increased in size since its first discovery, twelve months ago; that it had been pronounced to be a cancerous tumour by two surgeons; and that caustics had been applied several times, for the purpose of destroying the morbid growth. He had suffered no pain, and had been annoyed only by the bulk of the tumour, which interfered with mastication, etc. He also stated that he had for some time been passing, at intervals, joints of tapeworm, for the cure of which various remedies had been tried, but without success.

On examination, a hard firm tumour, about the size of a large walnut, was found to occupy the left submaxillary region. It was loose, could easily be moved about, was oblong in form, and somewhat lobulated. The skin over the swelling was healthy and free. Pressure produced little or no pain. When the mouth was examined, the tumour was seen to occupy the usual position of ranula under the tongue. It presented an irregular, jagged appearance, at the part where caustics had been applied. When the tumour was pushed into the mouth by the fingers of one hand, and was carefully examined by those of the other, it conveyed a feeling of a hard body contained in a cyst, having considerably thickened walls, and, although much larger than the ordinary tumours from salivary calculus, I felt convinced that the history of the case, the appearance of the patient, and the feel and situation of the tumour, all agreed in pointing to such a conclusion, and certainly negatived any notion of it being a cancerous growth. The point of a scalpel was passed into the tumour, and, being found to grate on a hard substance after passing through the fleshy coverings, was carried along the proximal end of the swelling; and a large salivary calculus was easily tilted by the finger through the opening thus made. There was still considerable swelling remaining from the thickened cyst.

The calculus was of about the size of an almond in its shell, weighed eighty-four grains, and was evidently composed principally of the earthy phosphates.

September 4th. The incision in the mouth had healed, and the induration had sensibly diminished. One drachm and a half of the ethereal oil of male fern had been administered this morning, the patient having taken no solid food since the middle of yesterday; and a worm (*tenia solium*) several yards in length was expelled, under the action of a dose of castor oil administered four hours after the dose of male fern.

September 5th. Discharged.

REMARKS. The large size of the calculus, which with the thickened cyst, had led to the supposition of a cancerous tumour, constitutes the interest of this case, as smaller salivary concretions have been occasionally met with and recorded by surgical writers. The resemblance to a scirrhous

tumour was increased by the effect of the caustic on the investing cyst, but a sensation was conveyed to the finger of greater hardness and density than even the firmest schirrus, and the cancerous cachexia was certainly absent. The calculus itself is evidently identical in composition with the tartar deposited on the teeth from the saliva, and certainly does not confirm the opinion of M. Stanaki, who, reasoning from a single case, advanced the theory that such concretions have always a tooth for their nucleus, which theory was, however, completely refuted by the more extended observations of Forget, who collected a number of cases in which no trace of a tooth as a nucleus was found. The largest calculus in M. Forget's cases weighed forty-four grains, only one half the size of the one now described; nor can I find one of equal size on record.

The other ailment of the patient was as readily removed. The oil of male fern successfully expelled the parasite, which had set other means at defiance. I shall not offer many observations on the subject of *tenia*, after the very able and comprehensive paper of Dr. Jenner which lately appeared in the JOURNAL. Having lately tried the kousoo with no effect, I was induced in this case to give the ethereal oil of male fern, which in the experience of this hospital has proved most efficacious. It appears only to act on the parasite, and to produce little or no effect on the patient. We do not prepare our patients as recommended and practised by Dr. Jenner, but find that a dose of from one to two drachms taken after fasting for some hours, followed by a dose of castor-oil, generally destroys and expels the *tenia*. Whether beer, as advanced by some experienced German physicians, really favours the development of tapeworm, I do not pretend to determine by one case, but certainly my patient confessed to a tolerably free use of that beverage.

ROYAL FREE HOSPITAL.

CASES OF ANEURISM OF THE AORTA.

By WILLIAM BRINTON, M.D., F.R.C.P.,
Physician to the Hospital.

CASE I. W. H., aged 45, a labouring man, of healthy robust conformation, and of tolerably temperate habits, applied, as an out-patient of the Royal Free Hospital, on the 8th of June, 1855. For three months he had suffered from pain in the chest, accompanied by dyspnoea and cough; and for a fortnight, from oedema of the legs.

His appearance and physiognomy at once suggested cardiac disease. On examination, the urine was found to be free from albumen, scanty, and high-coloured. His pulse and breathing respectively averaged about 90 and 24 in the minute. The pulse was irregular, intermittent, and occasionally almost imperceptible; but there was no obvious difference in that of the two wrists.

On examining the chest, a large oval area, of complete dulness to percussion, was found on the left side of the sternum. This area—bounded above by the second, below by the sixth rib; within by the left edge of the sternum, without by a line about one inch external to the left nipple—evidently included, at its lower part, the ordinary cardiac dulness felt over the front of the heart's apex. Here it was somewhat less intense; but, traced upwards, was quite continuous into the more complete *matité* of the upper part of this oval region.

These gradations of dulness to percussion were about parallel with those of cardiac impulse. Feeble and indistinct below, in its normal situation, the force of the heart's beat increased as it was traced upwards, until it reached its maximum in the second intercostal space, about two inches and a half from the left border of the sternum. Here it was a quick jerking blow under the fingers, with scarcely any of that swelling expansive feel that it usually suggests even when increased by excitement.

As regarded the sounds of the heart, the whole time between two successive beats was taken up by a soft bellows-sound of moderate loudness. As the beginning of this bellows-sound just preceded the radial pulse, and exactly coincided with the beginning of the impulse aforesaid, there was fair ground for regarding it as systolic. This decision was, however, more conclusively formed, from the fact, that a distinct (though feeble) diastolic click of the arterial (probably of the aortic semilunar) valves could be heard *through* the soft bellows-sound.

The bellows-sound diminished rapidly towards the heart's apex; and faded away much more gradually as it was traced along the course of the aorta across the sternum. Its point of maximum intensity was exactly over the third chondro-sternal articulation of the left side; in other words, two and a half inches within, and one inch below, the point of maximum impulse aforesaid.

There could be little doubt as to the nature of the case, difficult as it seemed to explain all its details. The patient was at once admitted into the wards of the hospital.

For a time, he seemed much relieved. The dropsy almost disappeared; his debility diminished; and his pulse became stronger. The pain and dyspnoea also became less urgent. But he remained incapable of lying down in bed. And in a week or two the dropsy increased again; his legs becoming the seat of a raw red eruption, which constantly wept quantities of serum. In spite of all that could be done in the way of stimulants and anodynes, he gradually sank, and died, without much pain or dyspnoea (till latterly), about six weeks after his admission.

The necropsy revealed the expected aneurism of the ascending aorta. The tumour, of the size of an orange, projected from the anterior wall of the aorta immediately above the semilunar valves. The vessel was also dilated at and beyond the aneurism; and the sinuses of Valsalva shared in this enlargement. The separation of the points of maximum sound and impulse seemed to be explained by the fact, that the greater part of the aneurism itself was filled with a dense laminated clot of long standing; so that it was only above and external to the tumour that the dilated vessel could be forced by its fluid contents against the wall of the chest during the cardiac beat. Other appearances were healthy.

CASE II. A. W., aged 42, a tall, ruddy, handsome Scotchman, who had for some years worked in the Docks, became an out-patient of the Hospital about a year ago. He had latterly once or twice experienced a strange suffocating sensation during violent bodily exertion, with pain shooting through the breast-bone to his back, but seemed otherwise to have had excellent health. Pulse 70 per minute, rather jerking. Breathing about 17.

On examining the chest, it was everywhere of normal resonance to percussion. The lungs seemed every way healthy. But the second sound of the heart was rather feeble, and not so short as it should be; while the first sound was accompanied by a roughish blowing, that occupied almost all the period of the heart's action and pause. This sound diminished towards the apex, less rapidly along the aorta, and was most intense over the third chondro-sternal articulation, just as in the preceding case, except that it was louder over the sternum itself.

Here, again, I could have little doubt that I had before me an aneurism of the ascending aorta. But whether this aneurism were true or false—whether it was a mere uniform dilatation of the vessel, or had involved the more usual lesion of the arterial coats—there were no signs to decide. All that I could detect seemed explicable on the supposi-

tion of an ordinary aneurism, not yet large enough to reach the wall of the chest, so as to impart to this an abnormal impulse and dulness to percussion.

He was treated by steel and quinine, and small blisters; and was enjoined (as far as possible) to avoid all exertion of a violent kind, and to live carefully, but well. Under this plan, he became quite free from his previous symptoms; and described himself as feeling better and stronger than he had done for many years past. For some months I saw him at intervals; continuing, every now and then, the above tonics.

On the 6th of August last, after having lost sight of him for about three months, I was struck by the sight of his face (now haggard and excited) in the out-patient room. He had overworked himself, had been unable to come for his favourite remedies, and was now seriously alarmed by the increasing frequency and severity of these attacks of pain and suffocation. Latterly, indeed, the pain seemed to have become almost fixed; and some dyspnoea was always present. His pulse was much more feeble, about 90 in the minute; his breathing about 30. He was admitted an in-patient.

Finding, on examination, that the chest had scarcely altered in the physical signs it offered since I first examined it a year before, I could not help contrasting this fact with the ordinary growth of an aneurism. Taken in conjunction with the great increase in the severity of all his symptoms, I found myself driven to infer that it was (probably, though by no means necessarily) a dilatation (and not an ordinary aneurism) of the aorta that I had before me.

From this time, the symptoms rapidly increased in severity. The pain became exceedingly severe. The dyspnoea debarred him from lying down. He had one or two attacks of vomiting; and, for a few days before his death, oedema. He died in less than three weeks from the date of his admission.

On examination, the aorta was found uniformly dilated to about twice its normal diameter, from the aortic valves to about a quarter of an inch below the origin of the innominate artery. The whole of its inner surface was studded with atheromatous deposit, which also extended some distance down the descending aorta. The semilunar valves were slightly thickened, but not so as to allow of any regurgitation. The heart was flaccid and dilated, but not unhealthy. The other organs were also sound.

CASE III. Though happily deficient in respect to the gloomy recital by which alone we verify the details of structural disease, this case is perhaps scarcely less interesting to the practical reader than those which have preceded it.

G. S., aged 38, a man of debauched appearance, who had for years drunk beer to excess, had been subject from his youth to rheumatism, and latterly to occasional attacks of redness and swelling in the joints of his feet, followed by desquamation. He became an out-patient of the Royal Free Hospital early in 1854.

On inquiry, it appeared that for twenty years he had suffered from occasional pain in the epigastrium, attended by a sensation which he described as "feeling as though there were strings" down the inner edge of each hypo-chondriac region, pulled upon by something in the chest. For the last ten years, more or less dyspnoea had also accompanied the pain. These symptoms were little affected by eating, but were easily increased or provoked by exertion, especially after a meal. For the last few months, there had always been some sensation of uneasiness and weight on the epigastrium, with languor, stupidity, and drowsiness, after moderate exertion. Occasionally he had slight cough; and for a day or two he spat up frothy mucus, once or twice streaked with blood.

On examining the chest, I found a rough systolic bellows-sound, which, prolonged beyond the normal systole so as also to occupy the greater part of the heart's pause, allowed a feeble second sound to be heard through it over the semilunar valves. Being traced hence along the aorta, this bellows-sound rapidly increased, so as to reach its greatest

intensity on the right edge of the sternum in the second intercostal space. On the left edge of the sternum, at the second chondro-sternal articulation, the sound to percussion seemed rather duller, and certainly of lower key, than elsewhere; but the difference was very slight. The pulse was about 80 in the minute, soft, and feeble; perhaps a trifle more feeble at the left wrist than at the right. The lungs were apparently healthy.

He was treated chiefly by blistering and tonics; among which latter the sulphates of quinine and iron seemed to agree with him best. He improved rapidly; and in the course of a few weeks acquired strength, and lost almost all his pain and dyspnoea. In October 1854, he became worse again; and was again relieved by similar remedies. In December 1854, he experienced a slight attack of gout, similar to those he appears to have had before. Subsequently he improved even more decidedly than before. After losing sight of him for a month or two, in November 1855, he again applied to me, having felt weaker for a few weeks previously to consulting me. The physical signs remained just as before; and the symptoms had only so far altered as that the sternal pain extended more definitely into the interscapular region, and occasionally even reached the shoulders. Since then I have seen him from time to time, at indefinite intervals; and, at my last examination of his chest, a few weeks ago, I could not detect any alteration in the physical signs; although exertion seemed to him to produce more diffuse pain, and more decided tremor, than before. His appearance is remarkably improved.

REMARKS. The diagnosis of the last case remains so far undecided, as that it is difficult to conjecture whether the lesion which probably engages the ascending aorta is a mere dilatation, or an ordinary aneurism. The trifling dulness on the left side of the sternum, the rough character of the bellows sound, point to the latter: the absence of impulse over the diseased vessel, and the comparatively fixed character of the physical signs, during nearly three years (unlike the usual advance of an aneurism) rather favour the former view.

Considering that the subject of the lesion was intemperate, gouty, of shattered constitution, and in embarrassed and anxious circumstances (his wife died after a long illness during the year 1855), I think it may be fairly inferred that the treatment pursued was advantageous to him. No doubt the improvement he experienced was partially due to the care he had been warned to take of himself; and especially to the very moderate exertion to which he was advised to limit himself. Still, these precautions had already to some extent been instinctively adopted by him long before he first saw me. And not only had I reason to fear that there had been no change in his diet or habits such as would account for any improvement in his health, but his amendment so immediately followed the administration of the drugs alluded to, and the connection between the two was so frequently observed in the fluctuation of his case during three years, that no one could reasonably have doubted it was due directly or indirectly to the iron, quinine, opium, sal volatile, and other remedies from time to time prescribed him.

It is not without reason that I am thus explicit as to the mental analysis which alone entitles us to talk of the efficacy of drugs. The wards of a hospital often cure disease—or at any rate *would* cure it—quite apart from any drugs there administered to the patient. Rest, light, air, nourishment, can often convert a dangerous typhus or scarlet fever into a mild case, such as will terminate by a rapid convalescence. But frightful as it is to witness from week to week the miseries revealed by the out-patient room of a large hospital, there can be no doubt that any one who conscientiously and carefully discharges the duties of a physician there derives peculiar advantages in the study of therapeutics. His patients (whose numbers perhaps are only limited by the number of hours he can devote to them) often remain under the same circumstances in which he finds them in all respects save one—that at certain times they take certain drugs. Diet, situation, air, water, light—all

these important elements of treatment are absent: and the only fallacy which can invalidate his conclusions respecting the efficacy of the remedies adopted, lies in “the natural tendency of disease to recovery”—a tendency which, in the case of many organic maladies, we know by fatal experience to be not very effective.

That, in numerous instances, incurable lesions of the heart and great vessels are susceptible of great improvement—that life may often be protracted for many years by careful treatment, is, I am aware, no new fact to bring before the profession. But as I have for years been sedulously watching many cases of the same kind as that above mentioned, and treating them in the same manner, and with equal success, I may be excused if I add my mite of information to what is already known on this subject. The old system of bleeding in these cases is probably not often practised in the present day. But I doubt whether the system of invigorating and supporting the patient is generally carried out to so full an extent as I have long found it advisable to do. And I am satisfied that even in the earlier stages of cardiac dropsy, such as but too often proves “the beginning of the end,” a great deal of mischief may be done in making too violent or exclusive efforts towards removing the effused fluid by mercury, purgatives, or diuretics.

It has lately been stated that marked irregularity of pupils may be regarded as a symptom of aneurism of the large vessels at the root of the neck. If it were worth while seriously to refute such a notion, I could easily bring forward cases in which the symptom has been caused by tumours other than aneurismal situated in this part; as well as instances in which aneurisms have failed to occasion it. But the explanation given of it seems to indicate that the pathognomonic importance attributed to it was the result of careless writing, rather than of hasty generalisation. Pressure or irritation of the sympathetic, of the inferior laryngeal, or finally, of the ordinary cerebro-spinal nerves, may give rise to the same characteristic symptoms for each of these three sets of nerves respectively, whether produced by an aneurism, or a benign or even a malignant tumour. And to say that it is more frequently produced by the former lesion is merely a circuitous way of stating that this is a more common tumour in this region than either of the two others: a numerical element of diagnosis which, though worthy of recollection, as an incentive (or even a clue) to further research in any given case, is, in all other respects, unworthy of consideration. It is a *prima facie* probability that every tumour in this situation is an aneurism; even while it is an absolute certainty that a large number of such tumours are not so. In the belly this numerical rule might be reversed: an abdominal tumour is probably *not* aneurismal. If rules of this kind serve to keep alive a salutary caution and care, and thus conduce to a strictness of examination which occasionally helps a practitioner to infer an aneurism where the signs are obscure, or to unmask a pseudo-aneurism where a bellows-sound simulates the existence of a true one, it is as much as (in most instances) we can expect them to do.

There is much that is interesting in the diagnosis of the first two cases. The first is worthy of note, as being rather a rare form of aortic aneurism, not only in respect to its proximity to the heart, but especially in respect to the large area of dulness to percussion on the left of the sternum, and to its completely merging below into the normal dulness of the cardiac region. The second is also curious, as an instance of death from an uniform dilatation of the aorta, not exceeding what pathological research sometimes shews to be compatible with life, and even with health. I should incline to hazard the conjecture that the fatal event was chiefly the result of nervous irritation, itself brought about either by violent stretching of the neighbouring sympathetic nerves, or by that interference with their circulation which the pressure of the aneurism might imply. How much injury may thus be inflicted on a nerve-trunk, and how seriously this may interfere with the nutri-

tion of all the muscles that trunk supplies, is illustrated by a dissection of mine recorded in the *Pathological Transactions* for the year 1851-2 (vol. iii, p. 305). And while I regret that circumstances prevented a similarly careful inquiry in this case, I may point out that the state of the heart (pale, flabby, but not otherwise unhealthy) is somewhat akin to that of the pale, exsanguine muscles of the left side of the neck supplied by the disorganised recurrent nerve, mentioned in the above record. The history of the final attack also appears to agree with such a conjecture. Sudden and severe pain, followed by rapid failure of the circulation—such a mode of death, taken in conjunction with the nature and amount of lesion in the vessel, and the condition of the cardiac muscle, points pretty conclusively to this explanation.

The above cases may also suggest an allusion to the much greater frequency than was formerly supposed, of the instances in which aneurisms do not terminate by rupture. Even in the class of intracranial aneurisms, where the diseased vessels are supported in a pulp of extreme physical delicacy, this termination does not occur in half the total number of such lesions.* And it is probable that the class of aortic aneurisms also rupture less frequently than is generally believed. But on this point, as well as on the differential diagnosis of aneurism and dilatation, the above cases may supply hints, but scarcely materials, for a conclusion. A large collection of the aneurisms on record—a collection which should number in tens and hundreds—could alone justify any inferences of much value.

Brook Street, Grosvenor Square, Sept. 29, 1886.

Hospital Gleanings.

PARISIAN HOSPITALS.

THE following notes, made during a recent visit to some of the hospitals of Paris, have been placed at our disposal by a surgeon to a provincial hospital.

HOTEL DIEU.

I went round with M. Follin. He showed an ingenious instrument for *cutting off the tonsils*; but made use of a simple hook and a bistoury, and performed the operation with dexterity upon a young man.

There were several cases of *syphilis*; for which the protoioduret of mercury and the iodide of potassium—the former in the earlier, the latter in the subsequent stages—are the remedies employed by M. Follin and all the other surgeons whose practice I witnessed.

In *chronic conjunctivitis*, a solution of nitrate of silver was the usual remedy employed. He directed my attention to one case, of some standing, though not very severe, in which a rotatory movement of the eyeballs upon their antero-posterior axes was remarkable. He attributed the movement to a sympathetic irritability of the oblique muscles.

Caustic was employed in several cases of *affection of the os uteri*; a dry tent, containing some proportion of chloride of zinc, was inserted a little way into the os uteri, and left there. Then, by means of speculum and syringe, the parts were well washed once or twice a day. One patient, on whom this treatment was adopted, had been seized with violent peritonitis, terminating fatally. A careful examination of the parts was made. There were several fibrous tumours in the wall of the uterus, some projecting externally, and one forming a considerable polypus in the interior. There were cysts with clear fluid, and more or less vascular lining, in both ovaries. In one of these an acute abscess had formed, and its contents, finding their way into the abdominal cavity, occasioned the fatal peritonitis. It was evident,

therefore, that, although the caustic might have had some effect in giving a more acute character to the chronic disease, it was in no other way connected with the fatal result.

A little boy, aged about 3 years, was brought in with *strangulated inguinal hernia*. The swelling had never been observed before that morning. M. Follin, being unable to reduce it, called for the chloroform, which was administered, by means of a sponge, with great care, M. Follin superintending the process. When the child was under the influence, he again resorted to the taxis, and, after a good deal of trouble and the employment of considerable force, succeeded in returning the bowel.

The treatment of sinuses and chronic abscesses by *injections with solutions of iodine* is in great favour here and at the other hospitals in Paris.

LA CHARITÉ.

M. GUÉRY showed me a lad on whom he had operated, three days before, for the *radical cure of inguinal hernia*, according to the plan proposed by M. Guérard. The case was going on well. M. Guéry said the operation was very easy of execution, and he did not conceive that it could be attended with much danger.

He is very fond of the *actual cautery as a counter-irritant* in various chronic affections of joints, chronic abscesses, etc. The part of the instrument which is heated is of about the shape and size of a bullet, with a blunted spike projected from one part of it. By several rapid applications of the latter on the skin covering the diseased joint, a number—twenty or thirty—of small superficial eschars are made, which separate in the course of a few days, when, if necessary, the application is repeated. This struck me as being a very simple, easily applied, useful, and by no means painful remedy; the chief objection to it being the horror which some of our countrymen would feel at the idea of the red-hot iron. Such things are more quietly submitted to by the French, if I may judge by the remarks of M. Guéry at the next bed, which happened to contain one of my own compatriots.

A *dislocation of the last phalanx of the thumb*, which had been treated by a quack for ten days and then admitted into La Charité, was shown me. M. Guéry said that he had employed enormous force in the attempt to reduce it; but had given the case up in despair.

LA PITIÉ.

I found M. MAISONNEUVE injecting iodine into a large deep seated *acute abscess of the thigh*, apparently connected with the knee-joint, and consequent, I was informed, on an operation for the division of stricture performed by him some days ago. The man had been out of health at the time of the operation, and appeared to me to be in a very precarious state. The canula was left in the wound to afford a vent for the iodine and the pus.

His mode of operating on *strictures* is peculiar. He kindly explained the whole process to me, and showed me his instruments. He commences with very small elastic bougies, which taper towards the end so as to be scarcely larger than a thread. One of these he contrives to pass through the stricture, however tight it may be. I was told that he shows great dexterity in this procedure, seldom failing to overcome the difficulty in a short time. He has these delicate bougies of many sizes, and to the end of the handle of each a delicate silver worm is attached. When he is conscious that the bougie has entered the stricture, he screws on to the handle of it a delicate silver tube with a slit along the convex side of the tube. The bougie is now carried on before the silver tube into the bladder, and the tube, following the bougie, enters and passes through the stricture. He next carries along the tube an iron wire with a delicate lancet-shaped blade appended to it, which projects through the slit just mentioned. This being carried down the urethra along the tube, does not touch the healthy part of the urethra, owing to its size; but when it reaches the stricture, an impediment is felt; and if it be pushed on, it incises the edge of the stricture. This may

* On this point, the reader may be referred to a Report and Collection of Cases, by Dr. Brinton, in the *Transactions of the Pathological Society for the Session 1856*, i, p. 48.