save both operator and patient some disappointment; and will refer those interested to page 161 *et seq.* of Schweigger's *Handbook of Ophthalmology.*

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REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GUY'S HOSPITAL.

A FATAL CASE OF ANTHRAX.

(Under the care of Mr. CHARTERS SYMONDS.)

[WE are indebted to the House-Surgeon, Mr. SALVAGE, for notes of the case.]

M. M., a man aged 38, was admitted on Sunday, March 24th, suffering from charbon. For sixteen years, he had been engaged in a hide-warehouse, and during the previous week had been employed at a wharf, moving hides imported from China. Three days before admission, the patient's neck felt sore, and he noticed a small pimple, about the size of a pin's head. On the two following days, this pimple grew larger, and became a little painful. On the day before admission, he felt sick, and suffered from headache. When seen on Sunday about midday, the man looked in perfect health, and, except for a headache, felt so. On the back of the neck, an inch and a half below and behind the right ear, was a small reddish-brown irregular patch, about one-eighth of an inch in diameter, surrounded by a zone of very indefinite vesicles. Around this, the skin was hard and dusky red for about three-quarters of an inch. On handling the "pustule," it could be felt as a circumscribed swelling, and was elevated about a quarter of an inch above the surrounding skin. There was no lymphatic imflammation, but just anteriorly there was some infiltration towards the ear. The vesicles being pricked, the fluid examined, and the characteristic bacillus found, the whole mass was freely excised down to the deep fascia, some fibres of the trapezius being exposed at one point. The temperature at the time of operation was 99.4° Fahr.; six hours later, it was 103.8° Fahr., with a pulse of 120. The man was ordered three grains of quinine every six hours, a calomel-purge, and stimulants if the pulse rose.

He had a fairly good night, and next morning, March 25th, felt comfortable, except for a headache and slight nausea. The temperature was 99°, and the pulse 100. On dressing the wound, the œdema in front was found to have extended and reached the angle of the jaw; there was no lymphatic inflammation. At 9 P.M., he was much in the same condition; he had taken his food well, and was free from pain.

At eight o'clock the next morning, March 26th, he was reported by the sister to be quite sensible, and nothing unusual was observed; but, about 8.45, his breathing attracted attention, and he was found in a restless insensible condition, with stertorous breathing. At 9 A.M., he was throwing his arms wildly about, was breathing heavily; his face was dusky, and he was quite insensible; the pulse was 110, and the temperature 99.6° Fahr. Free incisions were at once made in the neck all over the brawny area, which had extended during the night; to encourage bleeding, a poultice was applied. The right basilic vein was opened, and twenty minims of a solution of perchloride of mercury, 1 in 1,000, were injected. This was repeated half an hour later, and again after a further interval of two hours. Ten minims of liquor ammoniæ fortior were also injected, diluted with an equal quantity of water. No benefit resulted from this treatment; the man still continued restless, with stertorous breathing, the face became more and more livid, he gradually grew weaker, and died at 3 P.M. on March 26th, just forty-eight hours after the removal of the charbon, and about five days after inoculation.

At the necropsy, made by Dr. Carrington, extensive meningeal hæmorrhage was discovered. The blood was confined beneath the arachnoid, but was widely diffused over the brain; numerous anthrax-pustules were found in the mucous membrane of the stomach and small intestine; these appeared as elevated patches, with a brown central slough, surrounded by a zone of intense injection. The valvulæ conniventes were œdematous, and there was a little ascites. The cellular tissue of the neck was œdematous, and the aryteno-epiglottidean folds, especially the right, so swollen that it seemed impossible that any air could have entered the trachea. There were also a few small hæmorrhages into the lungs a short distance below the pleura, and one of very considerable extent at the left base. The spleen weighed 17 ounces, but was not soft. The bacillus anthracis was found abundantly, not only in the serum before death derived from the vesicles, but also after death in the serum of the œdematous tissue of the neck.

REMARKS BY MR. SYMONDS.—This case was one of unusual severity in respect of the general symptoms, while the local affection was at first slight. The only character determining the nature of the "pustule" was the zone of vesicles, for the centre had not the usual depressed dark appearance. So small was this local "pustule," that I deemed it necessary to confirm the diagnosis by an examination of the fluid drawn by a puncture from the vesicles before operating. The characteristic bacillus was recognised after staining in the usual way, and at once the whole mass was freely excised. The rapid rise of temperature, after the operation, must be attributed to another cause than the anthrax-poison. The intravenous injection was used with a view of destroying the bacilli, but already the fatal hæmorrhage had occurred. Still it seemed possible that a sudden development of the bacillus might explain his symptoms, and, on this ground, the injection was used. It is not uninteresting to note that neither the perchloride nor the ammonia had any appreciable effect. The subject of anthrax amongst the wharf and warehouse labourers of Bermondsey has been fully inquired into by Mr. Davies-Colley, who published a series of cases in the *Medico-Chirurgical Transactions*, and later by Mr. Spiers, who reported to the Local Government Board.

METROPOLITAN FREE HOSPITAL.

SEVERE CARDIAC DYSPNŒA; GREAT BENEFIT FOLLOWING VENESECTION.

(Under the care of Dr. DUDLEY.)

[Reported by CHARLES POWER, M.A., M.D., and EDWARD RICE, M.B.Lond., House-Surgeons.]

A. T., AGED 64, a stout farmer, who had been an athlete in his younger days, and had always enjoyed good health, had an attack of rheumatic fever eighteen years ago, from which he appeared to recover perfectly. Shortness of breath, which he attributed partly to his having lately become very stout, and partly to flatulence, had been present for a year. During November and December 1884, he had four attacks of "faintness," from which, however, he soon recovered. On January 12th, he had another attack at an hotel, and was at once admitted to this hospital.

On admission, his breathing was short and laboured; his countenance anxious, and face of a dusky hue; the pulse was very rapid and weak, and the extremities cold. There was slight general bronchitis; the heart-sounds were inaudible. There was no œdema, but the urine contained a trace of albumen. From this attack he soon recovered under the influence of hot-water bottles and stimulants, and remained fairly well until early on the morning of January 16th, when he was seized with another attack. The dyspnœa and lividity were very marked; the extremities were cold, and the skin covered with profuse perspiration; the pulse was very rapid, and somewhat weak. An emetic was administered, but without effect; then hot-water bottles were applied to the feet, and a mustard-plaster to the præcordium. The patient, however, rapidly became comatose, and apparently moribund. Twenty minims of ether injected subcutaneously had no effect on the coma or dyspnœa, but the pulse became full, hard, and bounding.

The house-surgeons decided, considering the changed character of the pulse, to try the effects of bleeding. Sixteen ounces of blood were taken from the veins of the arm, with an immediate alleviation of all the symptoms. The pulse became soft, though still full; the lividity and dyspnœa passed away, and the patient became at once conscious, sat up, and spoke. About an hour after this the emetic acted, the vomited matter consisting of a quantity of mucus; this afforded further relief. From this time he progressed favourably; he was kept in bed and on low diet until January 19th, when he was allowed to get up; and, on January 30th, he left, apparently in his usual health. Careful examination of his heart before he went out revealed no signs of any abnormal condition.

It may be mentioned that, about three months previously, the same patient was brought to the hospital suffering from a similar severe attack. On this occasion, rest and stimulants sufficed to restore his equilibrium.

REMARKS BY DR. DUDLEY.—There is no doubt that judicious venesection saved the life of this patient; for, during this severe

attack of dyspnœa, the right side of the heart was gorged, and its distended walls were unable to contract. The inference to be drawn from the history of this case is, that the patient has fatty degeneration of the heart. Dry cupping is a remedial application, from which I have seen much benefit in cases of embarrassed respiration, and is another method of treatment not so much used at the present day as it ought to be.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 21ST, 1885.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Displacement of Lumbar Vertebræ.—Mr. ARBUTHNOT LANE referred to a paper he read recently before this Society, in which he described the modifications which the lumbo-sacral articulation underwent, owing to the transmission of the superjacent weight through it to the pelvis, in labourers. He found that they varied within broad limits, having at one extreme the cases in which the centre of pressure fell behind the body of the fifth lumbar vertebra. In the other extreme, the centre of pressure fell somewhat in front of the body of the last lumbar, so that there was in it a marked tendency to forward displacement of it, which was opposed by the articular processes of this vertebra. In this case, the spinous processes did not share in supporting or transmitting the weight to those of the sacrum, which were, proportionately to the bodies, but slightly developed. He had since found two remarkable modifications of the lower part of the column, resulting from pressure. The first of these presented most of the changes characteristic of the first group referred to above. The spinous processes and laminæ of the sacrum were enormously enlarged, and were very dense. The bodies were small, and cancellous in structure. The body of the fifth lumbar vertebra was displaced backwards, producing a condition diametrically opposite to that called spondylolisthesis. The second specimen, on superficial examination, appeared to belong to the second class of pressure-changes; but a vertical median section showed that this belonged to the same class as the specimen first described. It was taken from a subject who had evidently performed for a long time hard work, in carrying loads on the left shoulder, back, and neck. The lumbar spine was very convex, and presented the appearance of spondylolisthesis. On making a vertical median section, the last fibro-cartilage was seen to be increased in depth; superjacent weight, therefore, had been transmitted to the sacrum chiefly through the spinous articular processes, which were very much thickened. This had resulted in the sacrum yielding transversely about its centre, the upper part going forwards and downwards, so much so that, if the plane of the upper surface of the sacrum were continued forward, it would pass one inch below the lower magin of the symphysis. The diameters between the angle of the sacrum and the upper and lower margins of the symphysis were three and a half inches. The spinous processes of the sacrum were much enlarged, as were the laminæ. The sacrum had, during the later period of life, been acted upon by an upward pressure, probably due to a continuous sedentary position. This had served to increase its anterior concavity still further.

Cerebral Vessels in Congestion.—Dr. HANDFIELD JONES had examined the smaller cerebral vessels and capillaries in meningo-cerebritis, and in other conditions in which there was congestion. He found that the capillaries were obstructed by large leucocytes, which clung to the walls of the vessels probably during the last hours of life. In the arterioles he had seen more and bulkier corpuscles. Elongated corpuscles were not unfrequently met with. They probably originated from muscle-nuclei. The amœboid qualities of the corpuscles were very marked. The walls of the capillaries were very indistinct, and had sometimes broken down. In inflammation, the smaller vessels seemed reduced to mere tubes of corpuscular material, the adventitia not being recognisable. Denudation of the vessel-walls appeared to be the consequence of preceding hyperplasia. He had at first looked upon these conditions as distinctly pathological, but more recently he had met with changes of the same kind in cases where no cerebral congestion had occurred.—Dr. SAMUEL WILKS asked what were the conditions under which the changes occurred.—Dr. HANDFIELD JONES said that the changes were seen in inflammation and congestion, but were not certainly morbid.

Hypospadias.—Dr. WILLCOCKS showed the pelvis and genito-urinary organs from a case of hypospadias. The child was born at the seventh month; it was registered as a girl. On pulling back a preputial fold, a small glans penis came into view, and there were nodules in the "labia," which were clearly testes. Dr. Willcocks showed a drawing of a similar case of mistaken sex which had recently been under the care of Mr. Edmund Owen. The testicles were found, at the age of sixteen months, in the apparent labia. Dr. Willcocks also showed the testicle removed by Professor George Buchanan from the labia of a child, aged 9, who was supposed to be a girl. A small vaginal passage was present, but no rudiment of a uterus. In his own case, this vaginal passage was represented only by a small depression between the urethra and anus.—Mr. GODLEE related the case of a hypospadiac, born before due time, in whom the testicles did not descend until nine months of age. There appeared to be a rudimentary vagina.—Mr. J. H. MORGAN said the question of greatest interest was, whether the external organs of generation might be developed in the direction of one sex, while the internal organs were developed in the direction of the other.—Dr. S. WILKS observed that, in these cases, the difficulty in determining the sex was often increased, owing to the body assuming the feminine configuration in adult life. Hunter had observed this in the lower animals. Dr. Wilks quoted the case of a supposed woman, who was minutely examined by a well known obstetric physician, and even shown to the Royal Society. After death, the organs were found to be male.—The PRESIDENT quoted the case of a supposed woman, who, however, was built and walked like a man, and had the voice of a man, and hair on the face. He believed that functional combination of the sexes in one individual had never been observed.—Mr. MORGAN said that Otto had described a case in the sheep.

Destructive Disease of Lung from Obstruction of Bronchus.—Dr. PERCY KIDD showed specimens from two cases, in which destructive disease of the lung could be traced to obstruction of the main bronchus. The first case was that of a man, aged 38, who was admitted with physical signs of an aneurysm of the aorta, and consolidation and excavation of the left lung; he expectorated nummular purulent sputa. The aneurysm was found, after death, to involve the descending aorta, and to press on the left bronchus and the trachea; it had thin walls, and contained a small amount of thrombus at its posterior aspect. The right lung was healthy; the left lung was as large as the right, and riddled with cavities, situated in pigmented fibroid tissue, and intersected by numerous bands of a similar nature. Some of the cavities had a bronchiectatic appearance, and all contained reddish puriform liquid and some caseous material. There was slight amyloid disease of the liver, spleen, and intestines. In the second case, a woman, aged 25, the obstruction was due to extensive scarring of the trachea, involving the left bronchus, which was so constricted as to admit only an ordinary probe. The left lung was riddled with trabeculated cavities, bronchiectatic in some parts, separated by fibroid lung. The cavities contained a reddish fluid, and some putty-like material. The right lung contained some tubercular groups. The thyroid, mediastinal, and mesenteric glands, liver, spleen, kidney, gastro-intestinal and urinary mucous membrane, were all affected with marked amyloid disease. The symptoms were night-sweats, shortness of breath, and rapid wasting of eight months' duration. The fingers were clubbed; the left side of the chest was almost motionless and dull, with bronchial breathing and pectoriloquy. Signs of excavation became marked; albuminuria and dropsy, followed by profuse diarrhœa and hectic fever, determined the patient's death. Examination of the secretions from the pulmonary cavities, in both cases, failed to reveal any tubercle-bacilli. The first case resembled the case recorded by Dr. Irvine; the destructive disease of the lung being probably due to the mechanical results of compression of the bronchus by an aneurysm, pressure on the pulmonary nerves being of secondary importance. The second case differed; the lung-disease being the result of an internal stricture of the bronchus, it could not be attributed to pressure on nerves, and strongly supported Dr. Irvine's view, that the lung-changes had, in the main, a mechanical origin.—Dr. CREIGHTON said that destructive changes in the lung were not unfrequently produced by syphilis; syphilis was certainly present in one of these cases, and he asked whether the influence of this element had been considered.—Dr. GOODHART thought that, in considering the way in which the destructive lung-disease was produced, the ulceration at the seat of pressure ought not to be overlooked; it might set up secondary infection of the peripheral parts of the lung.—Dr. EWART observed that, where the lung was completely collapsed, no ulceration of the pulmonary tissue occurred at the seat of pressure.—Dr. SEMON said that Dr. Irvine had attached much importance to the ulceration at the seat of pressure.—Mr. R. J. GODLEE asked Dr. Kidd whether he saw any analogy in this lung to the changes seen after tracheotomy and cut-throat, where the foul secretions set up septic pneumonia.—Dr. HALE WHITE observed that, in ulceration from other