

where it was dimpled and evidently becoming adherent to the parts beneath while there was a tendency to retraction of the nipple. The tumour was moveable, but not freely so, in the surrounding breast tissue. In the axilla a hard gland as large as an almond was felt under cover of the border of the great pectoral muscle and several smaller shotty glands were apparent higher up. The pain, which was acute and tended to recur in paroxysms, was of a "sharp stabbing" character and was felt not only in the tumour but "down the inner side of the left arm" as far as the elbow. This symptom, which first led the patient to take an anxious view of the situation, was increasing rapidly in severity and was telling considerably on her general health, interfering with sleep and giving rise to much mental distress. Such, then, in brief, is the history of the case to which I wish to call attention.

For reasons which I shall presently state, notwithstanding the patient's feeble state of health and advanced age, I determined to operate and the patient readily consented. Accordingly, on March 23rd, chloroform was administered by my friend Mr. G. Everitt Norton, and I removed in one mass the whole of the left breast, the underlying pectoral fascia, and the axillary glands, together with the whole of the axillary cellular tissue, which was studded with numerous small shot-like nodules. The operation lasted some 40 minutes and was accompanied by considerable shock, from which, however, the patient soon rallied. The wound was dressed for the first time after the operation on the eighth day and union was found to be perfect. The patient was completely relieved of her pain, her appetite returned, she gained flesh, slept well, and became more cheerful. She got up on the fourteenth day and in another week left the nursing home for her own abode. The stiffness in her arm soon disappeared and she was able easily to approximate the palm of the hand to the occiput. Her general health continued good and the patient enjoyed life in her own way without pain or any sign of recurrence to the day of her death, which took place suddenly from heart failure on Oct. 20th, 1899, 19 months after the operation, she having been out for a walk the evening previously. The result, I think, quite justified the procedure resorted to.

"All's well that ends well," says the proverb, and it is easy to shake hands with and congratulate oneself on the success of a perilous venture. In cases such as these the point of prime importance is the accurate gauging of the *pros* and *cons* for operation. In the present instance the patient placed herself unreservedly in my hands, steadfastly refusing to have another opinion, so that on my shoulders fell the responsibility of deciding the momentous question as to whether an operation should be undertaken for her relief or whether she should be left to her fate. On thinking over the case at the time the following questions occurred to my mind: 1. Is it possible to remove the whole of the disease with good prospect of subsequent immunity? 2. Supposing this question to be answered in the affirmative, is the patient in a fit condition to withstand the shock necessarily attendant on a somewhat prolonged surgical operation under anaesthesia? 3. Supposing the two foregoing questions to be answered in the negative, what will be the probable subsequent history of the case if left to run its course? In other words, one had to weigh the risk of shock and risk of recurrence after removal with their attendant consequences against the inevitable increase of the tumour, which would probably sooner or later ulcerate, and the increase of pain which opiates sooner or later would cease to relieve. In the present case the facts seemed to me to be as follows:—1. The complete removal of the disease would entail an extensive operation which would occupy some time and give rise to considerable shock. 2. The patient, though somewhat feeble and advanced in years, was in fairly good health, thin, wiry, and of a cheery, hopeful disposition, and she should be, for her age, possessed of fair rallying powers. 3. The growth was evidently increasing rapidly and the pain was already as much as the patient could bear. On reviewing these facts carefully I came to the conclusion that notwithstanding her advanced years it would be better, on the whole, for the patient to run the risk of operation rather than to face the inevitable and in all probability be condemned to a life of suffering and a miserable death. How far this opinion was justified by the result the brief notes of the case above related bear witness.

No doubt, as Mr. Gardner remarks, cases of scirrhus in people of advanced age are rare. This, I take it, is due partly

to the fact that the number of people who reach advanced age, say of 30 years, is comparatively small, and partly that those who do survive to such an age have outlived the time of life at which the incidence of cancer is common. But the chief lesson to be learned from cases such as Mr. Gardner's and my own is, I think, that while we should by no means under-estimate the increased risk which must necessarily occur in operating on the aged we should not without the most mature consideration withhold from a patient, however old, the benefits which surgery alone can bestow.

Beaumont-street, W.

A CASE OF TWO ANEURYSMS OF THE TRANSVERSE ARCH OF THE AORTA.

By GILBERT J. ARNOLD, F.R.C.S. ENG.

THE following is an account of a case which presents some points of interest.

A patient, a man, aged 40 years, consulted me on March 23rd, 1900, stating that the previous night he had been somewhat alarmed by an attack of difficult breathing. He further stated that he had suffered for some years from bronchitis and emphysema of the lungs and latterly occasional attacks of spasmodic asthma for which he had been under treatment abroad. His voice was hoarse and there was sometimes a dry cough. He had marked inspiratory stridor. The hoarseness had, he said, come on suddenly a few days previously. A laryngoscopic examination revealed the cause of the hoarseness. There was abductor paralysis of the left vocal cord. The larynx was normal in other respects. I should have mentioned that the patient had had, and been under treatment for, syphilis some 16 years ago. A thoracic aneurysm involving the left recurrent laryngeal nerve appeared by far the most probable diagnosis, but an examination of the chest did not reveal any abnormal pulsation, any murmur, any dull area on percussion, or cardiac hypertrophy, neither was there any inequality of pupils or difference in the radial pulses. I did not find tracheal tugging well marked. A guarded prognosis was given and potassium iodide was administered, gentle walking exercise being allowed. A few days later the condition of the vocal cords was practically the same—the right cord moving well and the left relaxed in the cadaveric position; there was therefore some paralysis of adduction too. The hoarseness and inspiratory stridor continued unchanged and he complained of very slight difficulty in swallowing. The dosage of iodide was increased. I by no means anticipated that a fatal termination was so near at hand. On April 16th the patient sent for me on account of slight hæmoptysis. He was put to bed, the services of a nurse were obtained, and the recumbent position was insisted on. Ergot was administered and ice was given to suck. The hæmoptysis, which amounted to half a wine glassful of bright red frothy sputum, ceased within two hours. The patient informed me that he had spat blood on one occasion about three weeks before. He died the next day in bed from a sudden profuse hæmorrhage from the mouth.

Necropsy.—The heart and lungs were practically normal except that the bronchi were partially filled with blood. Arising from the convex upper border of the transverse arch of the aorta was a firm sacculated aneurysm situated between the origins of the innominate and left subclavian arteries and behind the left common carotid, the lumen of which was somewhat flattened out by pressure of the aneurysm. Passing in front and in contact with the sac, which was of the size of a hen's egg, was the left vagus nerve. The sac was nearly filled by firm buff-coloured clot disposed in concentric laminæ. There was a second sacculated aneurysm of the size of a billiard ball also originating from the transverse arch and communicating with it by an aperture of the size of a crown-piece. This sac was in direct contact posteriorly with the trachea and also slightly with the oesophagus, but did not obstruct these structures post mortem, although it probably did so to a slight degree during life when distended by the blood-pressure. It contained recent blood-clot only. On slitting up the trachea posteriorly there was seen opening into it in front the aperture of a small ragged channel of communication, passing between two of its cartilage rings exactly one and a

half inches above its bifurcation, leading into the second sac. Through this channel, which was about five millimetres in length and one in diameter, the hæmorrhage had occurred. On the left side of this sac and intimately incorporated with its adventitious walls the left recurrent laryngeal nerve could be traced, its component strands being spread out and of the same dark colour as the rest of the walls of the sac. From its origin from the vagus under the arch of the aorta until it reached the sac and again above the sac the nerve was of normal appearance macroscopically. It is obvious that its conductivity must have been quite abolished. The arch of the aorta showed gross changes of a chronic inflammatory nature (aortitis). There was great thickening involving all the coats. The thickening was not uniform, but was especially marked in the form of hyperæmic patches, over which the intima was slightly raised. The thickening of the aorta was particularly noticeable around the orifices of the two aneurysms which were distant at their nearest points by about half an inch. Sections here showed marked thickening and hyaline degeneration of the coats; the adventitia and adjacent cellular tissue also exhibited groups of small round inflammatory cells which had penetrated the walls of the aorta. Ordinary atheroma with fatty and calcareous changes was not present in the region of the aneurysms.

The following points about the case may be briefly alluded to. 1. The speedy fatal termination after the onset of the laryngeal paralysis. This symptom had been manifest less than one month. Had the laryngeal paralysis appeared earlier in the case the patient would have heard little of "spasmodic asthma," the dyspnoic attacks being doubtless due to recurrent laryngeal irritation coming on earlier than the paralysis. 2. The narrow channel through which the blood escaped. The aneurysm did not burst. The case closely resembles in this respect the one figured on page 382, vol. vi., of Allbutt's System of Medicine, by Sir W. T. Gairdner. 3. The occurrence of two aneurysms arising so close together in the same vessel—the one having undergone spontaneous cure, the other, probably of much more recent origin, showing no signs of doing so. 4. These aneurysms could not be attributed to strain or laborious occupation. Also, the patient, who was a gentleman, had, as far as I could learn, never indulged in much exercise and for some years had regarded himself as rather an invalid. He was of temperate habits, but he certainly had had syphilis years ago and most probably the lesions in the aorta (arteritis) have an etiological connexion with that fact.

Torquay.

INTESTINAL OBSTRUCTION DUE TO PER- SISTENT MECKEL'S DIVERTICULUM; SUCCESSFUL LAPAROTOMY.

By F. FAWSETT, M.B. LOND.,

SURGEON TO THE LEWES INFIRMARY AND VICTORIA HOSPITAL;

AND

R. F. JOWERS, F.R.C.S. ENG.,

ASSISTANT SURGEON TO THE SUSSEX COUNTY HOSPITAL.

A HEALTHY girl, aged 11 years, went to bed in her usual health on the evening of March 13th, 1899. Although her bowels had been twice relieved during the day she was given a dose of compound liquorice powder. At midnight she awoke with violent pain in the abdomen and was sick several times. On the following day, March 14th, she was seen by Dr. Fawsett, who prescribed an effervescing mixture containing diluted hydrocyanic acid, iced milk, and soda-water, and also hot fomentations to her abdomen. The pain was a good deal relieved but recurred at intervals. Vomiting occurred, but only after taking nourishment, and two or three times the milk-and-soda was retained. No action of the bowels took place. On March 15th no food was given by the mouth and vomiting only occurred once, when the child was moved in bed. As the pain continued and as nothing passed per rectum Dr. Fawsett held a consultation with Dr. R. Sanderson late in the evening of this day. An enema of warm water was given which returned clear with the exception that

the last portion was slightly blood-stained. While the water was retained it was thought that an indistinct lump could be felt in the right iliac region. Much gurgling and peristalsis were present. The diagnosis arrived at was acute intestinal obstruction, probably due to intussusception. A small dose of morphia was given hypodermically. As it was then late and as the patient was at Lewes it was decided that Mr. Jowers should be asked to operate in the morning.

On March 16th, at 11 A.M., Mr. Jowers saw the patient with Dr. Fawsett. The child complained of pain at the umbilicus, the abdomen was hard and rigid and slightly distended, distended coils of intestine could be seen, and there were marked peristalsis and gurgling on pressure. No lump could be felt. The tenderness seemed more marked in the left iliac region than elsewhere, the rectum was empty, and no motion or flatus had passed. The child was slightly under the influence of morphia at this time. Dr. W. A. Dow gave chloroform. The abdomen was opened below the umbilicus. On dividing the peritoneum a quantity of serous fluid escaped, greatly distended small intestine bulged into the wound, and after a considerable quantity had been drawn out of the abdomen and covered up in warm boiled towels, a bunch, consisting of several coils of collapsed small intestine, was found tightly nipped by a thin cord which came from the extremity of a Meckel's diverticulum, which was again attached to bowel, forming a ring through which the strangulated coils had slipped. The bowel down to, and including, the diverticulum was greatly distended. The patent portion of the diverticulum was about one and a half inches long and its base or opening into the bowel was fully two inches. To have excised it would have prolonged the operation, but as it was found to be impossible to return the bowels in their distended condition it was determined to utilise the diverticulum to relieve the distension. After covering the wound and the bowels, with the exception of the diverticulum, with boiled towels, the extreme tip was cut off with scissors, making a small opening through which a quantity of gas and a small quantity of liquid faecal matter escaped. The mucous membrane, which slightly prolapsed, was ligatured and returned, and the peritoneum was then sutured by a double row of Lembert's sutures so as to invert and considerably shorten the length of the diverticulum. The abdominal wound was closed with silk-worm-gut sutures, a glass tube being inserted for 24 hours. On the following day the tube was removed and the opening left was closed by a suture introduced for the purpose at the time of operation. Recovery was uninterrupted, there being no sickness and the temperature not rising above normal. The sutures were removed on the tenth day.

The striking thing about this case was that, considering the tightness of the constricting band, the symptoms were not more severe. The vomiting was never stercoraceous or continuous, the child did not look seriously ill, and the temperature was below 100° F. On the day preceding operation she vomited only once. Nor was this absence of vomiting due to masking of symptoms by morphia, as none was given till the night preceding operation.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTE ON THE PASSAGE OF A CALCULUS OF EXCEPTIONAL SIZE THROUGH THE RIGHT URETER AND THE URETHRA OF A MAN ABOUT 50 YEARS OF AGE.

By J. A. CUNNINGHAM, M.D., M.CH., R.U.I.,

MAJOR, I.M.S.

THE appended illustrations are faithful representations of a calculus composed chiefly of oxalate of lime with a coating in spots of urates and phosphates, which was passed recently by an officer in the Punjab Public Works Department. In its longest diameter the calculus measures fully half an inch.