Bowels acted once to-day. Takes food well; prostration very great; sweats a great deal. Pulse 112, very compressible; respiration 34; temperature 102.6°. Both lungs posteriorly have a want of resonance; respiratory murmur very feeble; anteriorly resonance good, but murmur feeble, although less so than posteriorly.—9 P.M.: Temperature 104.6°.

12th.—Pulse 140, tremulous; respiration 40; temperature 104°. Incision has sloughed to the size of a half-crown; the cellular tissue quite dissected out from between the muscles. Diarrhoea began again last night, and still continues (about six times in twelve hours); motions very loose, and passed under him. Delirious rambling and talking all night. Tongue very dry, brown, and tremulous; has a general tremor; weakness very much increased; sweats very much; skin quite moist and clammy. Takes food very freely. Died at 5.40 P.M., after convulsions.

Permission for a post-mortem examination was refused. This was a severe case of small-pox, complicated in the first place with bronchitis, and afterwards by consequences which were clearly traceable to the injection of the lymph. It was found, on inquiry into his previous history from his friends, that he had not enjoyed good health for some time, and had suffered from some chest affection.

CASE 2.—E. L.—, female, aged twenty-two, domestic servant, admitted on the 3rd of June, on the fourth day of her illness, with a papular rash, small in size, moderately copious in quantity, and discrete on the face; on trunk and limbs the eruption is sparse; temperature 99.8°. In the afternoon the lymph was injected in the usual manner (also in the presence of the representative of THE LANCET). 9 P.M.: Has had a comfortable day; tongue furred; eyes suffused; takes food freely; pulse 88; temperature 101.4°.

June 4th.—Eruption small and becoming vesicular; no swelling; had a quiet night, but without sleeping; slight soreness of throat; temperature 99.4°; pulse 88.—9 P.M.: temperature 103°.

5th.—Eruption maturing irregularly on face, where there are a few pustules, with a large number of vesicles and papules hard to the touch; on the trunk and limbs eruption small and aborting. Slept well; no swelling or uneasiness, except at the seat of the injection, where there is slight enlargement and tenderness; pulse 104; temperature 100°.—9 P.M.: Temperature 101.2°.

6th.—Pustules drying in places; pulse 96; temperature 99.8°.—9 P.M.: Temperature 100°.

7th.—Eruption generally drying and hardening; sleeps well; tongue clean and moist; the pain and swelling at the place of injection has quite gone; pulse 90; temperature 99.4°.—9 P.M.: Temperature 99°.

8th.—Pulse 84; temperature 98.6°.—9 P.M.: Temperature 98.5°.

9th.—Eruption quite dry; small crusts left, which are beginning to fall off; pulse 96; temperature 98.5°.—9 P.M.: Temperature 98.5°.

10th.—Face almost clear; feels quite well; pulse 72; temperature 98.6°.—9 P.M.: Temperature 98.6°.

11th (twelfth day of illness).—Pulse 96; temperature 100.4°.—9 P.M.: Temperature 100°.

12th.—Temperature 98.5°.—9 P.M.: Temperature 98.5°.

This case was a mild one from first to last, as shown by her condition when admitted. The impression of those watching her was, that the patient did not progress so rapidly as might have been expected from the general symptoms. The disease did not completely abort, or we should not have had the rise in temperature on the twelfth day, for which no accidental cause could be discovered.*

CASE 3.—M. A. P.—, female, aged twenty-three, domestic servant, was admitted on the 5th of June. Had three good vaccination marks. She states that after premonitory symptoms, which she describes as severe, a rash appeared yesterday. On admission the face was thickly covered with a rash of a dusky-red colour, and slightly elevated above the surface. An eruption of the same character, but more sparse, exists on the trunk and limbs. Eyes suffused; lips swollen, and the cuticle separating.—9 P.M.: Temperature 104.2°.

6th.—The eruption much the same as yesterday; lips and

eyelids much swollen. Did not sleep in the night; was not delirious. Early this morning hæmorrhage from the vagina set in; has slightly the characteristic hæmorrhagic fetor; bowels open; tongue much coated. Pulse 140; respiration 28; temperature 104.2°. Vaccine lymph injected.—9 P.M.: Pulse 140; temperature 104°; vaginal hæmorrhage much more severe. To have ten minims of solution of morphia with fifteen minims of dilute sulphuric acid in water, every three hours; ice and iced drinks *ad libitum*.

7th.—Eruption on face becoming irregularly vesicular, and seems confluent; on trunk and limbs also partially vesicular, but discrete. Swelling of face more marked; eyes suffused; lips black; fetor stronger. Vaginal hæmorrhage increased. Did not sleep and was delirious in the night; is now rational. Tongue covered with a thick brown fur. Pulse 120, small; temperature 102.8°. A patch of ecchymosis, about the size of a florin, exists at the place where the lymph was injected. She coughs slightly, and expectorates mucus streaked with blood.—9 P.M.: Temperature 103.4°.

8th.—Eruption on the face of a dingy-white colour, interspersed with livid patches; on the trunk and limbs many of the vesicles are filled with a black fluid. Lips and lower part of face much swollen. Did not sleep last night, but was not delirious. Vaginal hæmorrhage still severe. Tongue covered with a thick brown fur, and dry in the middle. Cough becoming troublesome, and expectoration of the same character as yesterday. She now complains of pain and a feeling of oppression across the upper part of the chest. There is dulness on percussion posteriorly on both sides, more marked on the right; loud râles are audible in the same parts. Pulse 140, very feeble; temperature 103°; respiration 28, laboured.—9 P.M.: Temperature 103.6°. Died at 11 P.M.; was conscious to the last.

Could not obtain leave to make a post-mortem examination. This was a case of malignant small-pox, in which the hæmorrhagic symptoms, although rather late of being developed, ran a short and severe course, uncontrolled by the injection of the lymph. Death occurred on the eighth day of the disease, evidently hastened by the most common complication of variola nigra—if it can be called a complication—congestion of the lungs. It was ascertained that this patient had led a rather irregular life.

(To be concluded.)

CLINICAL REMARKS

ON A

CASE OF ANEURISM OF THE ASCENDING PORTION OF THE ARCH OF THE AORTA,

PRESENTING ANOMALOUS SYMPTOMS.

By J. BURNEY YEO, M.B., M.R.C.P.,

ASSISTANT-PHYSICIAN TO KING'S COLLEGE HOSPITAL, AND TO THE BROMPTON HOSPITAL FOR DISEASES OF THE CHEST.

I AM indebted to the kindness of Dr. Lionel Beale, who was good enough to place one of his beds at my disposal, for the opportunity of following the clinical history of this instructive case to its fatal issue. Its chief interest arises from the difficulty that was experienced, during the life of the patient, in determining the precise morbid condition which gave rise to the distressing symptoms from which he suffered, and which, in no long time, brought his existence to a most painful termination. It was one of those cases in which a large aneurism existed close to the walls of the chest, without giving rise to any of those local signs which are regarded as characteristic of aneurismal tumours.

Before this man came under my care in King's College Hospital he had been a patient at two other metropolitan hospitals; and he presented himself with a written diagnosis of his case as one of "mediastinal tumour." This was the conclusion that had been arrived at by the physicians who had already examined him, and we arrived at a similar one. My colleagues, Dr. Beale, Dr. Duffin, and Dr. Baxter, examined the case carefully with me, and we were quite agreed as to the inferences to be drawn from

* Since the above was written, this patient has suffered from inflammatory symptoms over the dor-sum of the left foot and the patella of the same side, threatening suppuration in the latter situation.

the symptoms we observed. To what extent the previous diagnosis may, unconsciously, have influenced our own it is not possible to discover; but that such unconscious influences do occasionally guide the current of our thoughts, and determine the nature of our conclusions, is not to be doubted.

But before I make any further remarks on this case, I will briefly relate its history and the symptoms which attended its course.

The patient was a man forty-four years of age, and for twenty-two years had served in the British army. He appears to have been a steady, sober, well-conducted man, and was a sergeant when he left the service and joined the Corps of Commissionaires four years ago. With the exception of three attacks of intermittent fever in India, he had had no previous illnesses, and he had never suffered from syphilis. His father and mother were living and healthy, so were all his brothers and sisters; moreover he was married and had four healthy children.

When first he came under my observation in June last, he stated that about six months before he began to complain of slight difficulty of breathing, accompanied with a dry, tickling cough, both of which gradually became worse. About a month later *the glands on both sides of the neck became enlarged, as well as those in the right axilla*, and he could not stoop down without feeling giddy. At that time he became first an out-patient and afterwards an in-patient of the Metropolitan Hospital, and whilst there the presence of a tumour in the anterior mediastinum was diagnosed. The enlargement of the cervical and axillary glands continued for about six weeks, and then subsided. He stated that the superficial veins on both sides of the thorax and of both arms became prominent and distended during the time the glands in the neck and axilla were enlarged. Up to this time his general health had been good; he had a good appetite, and did not lose flesh; he complained, however, of the troublesome tickling cough, of a constant pain between the shoulders, and of an inability to lie down in bed with comfort.

About the end of last June—that is, about six months after the first appearance of his cough—he became an out-patient at the Brompton Hospital, and subsequently an in-patient in King's College Hospital. At this time the following notes of his condition were made:—

“He complains of severe cough and dyspnoea, with pain in the right subclavicular region, extending to the adjacent part of the sternum. The cough is of a curious ringing and incomplete character, the paroxysm being suddenly arrested or cut short; it is immediately brought on by depressing the chin, or assuming the recumbent position, or even by pressure of the stethoscope on the back of the chest between the scapulæ. He has no difficulty in swallowing, and never has had any. On visual examination, there is a distinct and uniform bulging to be observed anteriorly, over the upper part of the right side of the thorax, between the clavicle and the nipple. There is almost absolute dullness on percussion over this region, and the dullness extends horizontally across the upper part of the sternum, and invades the left infraclavicular region, as far as, or rather beyond, the inner third of the left clavicle. Moreover, on the right side the dullness extends vertically downwards, with little variation in intensity to that of the upper margin of the liver. Over this dull area the respiratory sound is distant and feeble. In the right supra- and infra-clavicular regions a loud and harsh grating sound is heard with the breathing, while over the right apex posteriorly loud harsh bronchial râles are heard, which extend (probably conducted) over the whole of the right lung. The resonance behind is equal on both sides, and the respiratory murmur at both bases is feeble. There is an absence of vocal fremitus on the right side in front. The heart-sounds are heard feebly over the dull area; they are normal, and the organ is not displaced. Over a circumscribed spot corresponding to the heart's apex there is heard a somewhat indistinct double friction-sound synchronous with the heart's action; immediately external to the limits of the præcordia it adopts the rhythm of the respiratory movements, and is very distinct as a double pleuritic rub around the base of the left lung, as far as the left scapular angle. The superficial abdominal veins are enormously distended, and their anastomoses with the thoracic veins distinctly manifest; but the veins of both upper extremities are

normal, as well as the two jugulars. The venous distension is limited chiefly to the veins below the nipple. The radial pulse on the right side cannot be distinctly made out; on the left side it beats 120 in the minute; temperature 102°. The face is livid, and wears an anxious expression; the pupils small but equal. There is no alteration of the voice. *No unusual impulse, no thrill, no abnormal cardiac or arterial murmurs, can anywhere be dis'inguished.* At present there is no enlargement of the cervical or axillary glands. On careful measurement it is noticed that the level of the nipple on the right side is half an inch lower than the left, and that the right half-circumference of the chest, on a level with the nipples, is two inches and a half greater than the left.”

Soon after his admission into the hospital the external jugular veins and the veins of the upper extremities became again distended, and it was noticed that the jugular veins filled from below if they were obstructed by pressing upon them above. This was associated with extreme orthopnoea and lividity of the face, conditions pointing to great pulmonary obstruction. At the same time the epigastric veins were enormously dilated and tortuous, and the current in them appeared to flow from above downwards. The cough, at this period, became very troublesome, and was accompanied with abundant muco-purulent expectoration. Paroxysms of difficulty of breathing were frequent and very distressing. The hands and feet were cold and livid, but not oedematous. He could neither lie back nor bend forwards, since both of these positions caused violent coughing, so he sat upright in bed, with his hands on his knees, breathing with great difficulty.

He derived a good deal of temporary relief from a draught every four hours, containing morphia, ether, and carbonate of ammonia. For several days the breathing became easier, the cough less frequent, the efforts to expectorate less arduous, and he obtained some quiet sleep.

On the 6th of July the whole circumference of the chest exceeded the previous measurement on the 17th of June by an inch, and the right half-circumference by half an inch.

The improvement in the more urgent symptoms was not of long duration, and on one occasion, when the distress of breathing was extreme and suffocation appeared to be impending, Mr. Roche, the house-surgeon, opened one of the greatly distended jugular veins, the right, and withdrew about six ounces of blood. This proceeding was followed by much relief to the breathing, and the patient was enabled to obtain some sleep. A few days later (July 10th) another attempt was made to relieve the paroxysm of dyspnoea by letting blood from one of the brachial veins, but without any good result. The case was rapidly approaching its end. At this period the poor man could obtain no relief in any position; no relief from any drug; night and day were passed in an agony of distress—restless, sleepless,—and we could only stand by sad and helpless spectators of this strange unequal fate. He had not inherited disease; he had done nothing to acquire disease; for a man in his position he had led a singularly blameless life; yet we saw him wrestling, in the prime of life and the perfect vigour of his faculties, with a cruel, miserable, and inevitable death. It was one of those terrible, unaccountable destinies that we are occasionally called upon to contemplate. He died, exhausted with suffering, after he had been in the hospital about a fortnight.

The local signs remained the same throughout, except that the bulging of the upper part of the right side of the chest slightly increased. But there was never at any time any abnormal vascular or cardiac murmur, thrill, or impulse to be heard, felt, or seen.

The following is the account of the post-mortem examination, which has been furnished me by Dr. Kelly:—On opening the thorax, the right lung was seen to be partially collapsed, and the pleura over it was covered with recent lymph. There were also some old adhesions between the right lung, chest-wall, and pericardium. The left lung was non-adherent, but there was some soft recent lymph on the surface of the lower lobe. Lying behind the top of the sternum, and bounded on either side by the lungs, lay a nearly oval tumour, which proved to be an aneurismal sac springing from the front part of the ascending arch of the aorta. The sac was about 3 in. by 2, with rather thin walls, and partly filled by a pale, fibrinous clot. The aneurism was so situated that the left innominate vein ran above its

upper surface, and joined the right innominate, to form the vena cava superior which ran along the right border of the tumour. The aneurism communicated with the aorta by an oval opening near the junction of the ascending and transverse portions of the arch; it then came forward, and spread nearly uniformly in all directions, so that it lay quite in front of the aorta and innominate. The heart was rather larger than usual; apex displaced a little downwards, valves healthy, walls flabby. The aorta was roughened and dilated just above the valves, and in several parts of its course was thickened with atheromatous deposit. The innominate, left carotid, and left subclavian arteries were healthy. The radial arteries on either side were healthy, and of the usual calibre; the right, however, was deeper seated than usual. The aneurismal sac pressed on the trachea and bronchi, and the mucous membrane corresponding seemed rather inflamed. Muco-purulent fluid exuded from the bronchi on section. The other organs were healthy.

This case, the history of which I have now related, was one of those where the diagnosis between the existence of an aortic aneurism and that of a solid mediastinal tumour becomes extremely difficult, if not altogether impossible. There were, doubtless, in this case many of the symptoms which accompany thoracic aneurism—I allude especially to the signs of intrathoracic pressure; the obstructed return of blood evidenced by the enlargement and tortuosity of the superficial veins; the presence of a hoarse, clanging cough, the sense of suffocation, the orthopnoea;—but then all these pressure signs might be equally well produced by a mediastinal tumour which was not aneurismal, while in favour of the presumption that such was really the nature of the disease we had none of those local signs which in the majority of cases accompany a large aneurism close to the anterior chest-wall. There was no impulse over the prominent portion of the thorax, no thrill, no abnormal cardiac or vascular sound whatever. Then, again, the prominence of the chest-wall, though considerable, was more uniform and diffused, and not pointed, as is usually the case with aneurisms in this situation. We also found a most unusual extent of percussion dulness, extending uninterruptedly far beyond the course and situation of the aortic arch, invading both sides of the chest, and extending on the right side to the upper level of hepatic dulness. We had further the history of enlarged cervical and axillary glands, and we had occasional rises of temperature to 102°, a circumstance which has been observed in connexion with intrathoracic growths, but upon which no importance can be placed, as it is commonly caused, as in this case, by intercurrent attacks of pleuritic inflammation.

Taking all these circumstances into consideration, we were led to prefer the opinion that this patient was suffering from a large and rapidly-increasing intrathoracic growth, occupying chiefly the anterior mediastinum—an opinion which the sequel of the case proved to be incorrect. The case was, however, altogether an anomalous one, and the deviation from the symptoms usually observed in such cases may be, to some extent, accounted for by the spreading character of the aneurismal tumour, and by the fact that it was nearly filled with fibrinous clot, while pressure on the trachea and right bronchus had led to collapse and condensation of a great portion of the right lung, and produced a corresponding amount of percussion dulness.

I may just allude, in conclusion, to the bold, and to my thinking perfectly justifiable, expedient which our house-surgeon, Mr. Roche, had recourse to, of opening one of the jugular veins when the symptoms of pulmonary obstruction became very threatening—a proceeding which, for a time, gave the patient much relief.

St. James's-street, May, 1872.

BEQUESTS, &c., TO MEDICAL CHARITIES.—Mr. Thomas Holme, of the City-road, bequeathed £5000 each to several charities, among which are King's College, the London, St. Bartholomew's, and Charing Cross Hospitals; he also left £1000 to the Cancer Hospital, Brompton and Piccadilly. The Royal Free Hospital has received £100 from the Grocers' Company. Miss Mary Jenny Prideaux Brune, of Padstow, bequeathed £100 each to the Royal Cornwall Infirmary, Truro, and the East Cornwall Hospital and Dispensary, Bodmin. Miss Mary Marples, of Tiptonville, bequeathed £100 to the General Infirmary, Sheffield.

PURULENT PERICARDITIS.

A CASE IN WHICH THE PERICARDIUM WAS FILLED WITH PUS.

By JAMES GREY GLOVER, M.D.

THE following case is one of considerable rarity, and perhaps worthy of being recorded.

On the 12th of April I was called to see a little girl, Grace W—, aged twelve, who had complained occasionally, but not severely, of pain in her left side for two or three months, had been ill for two or three weeks, and under the care of a homœopathic practitioner. I was told that her illness began with a slight shivering. There was no rigor throughout. She was pale and emaciated, and had a higher temperature than normal; on the second day of my attendance it was 101°. The most noticeable complaint she made was that of excessive tenderness when touched anywhere, but especially about the chest. This made physical examination impossible. Her respiration was rather quick, and her nostrils were dilated more or less on breathing. She generally sat up in bed, with her shoulders much rounded. I could not make out the indications of tubercular disease, which I suspected, either in the lungs or the abdomen. The first day or two of my attendance there was sickness, vomiting of almost everything taken, and a tendency to diarrhoea. The upper part of the abdomen was swollen and tender, and hard as far as could be ascertained. She became gradually weaker. She was clear and intelligent, but was occasionally excited in a semi-hysterical sort of way, and on the occasion of my visit the day before her death, went for a few minutes into a very curious trance-like condition, on coming out of which she sang in an Ophelia-like fashion. This nervous element in the case was very noticeable throughout, but I confess to being more impressed with the emaciation, the high temperature, the short breathing, &c. Though I had to content myself with a somewhat vague diagnosis, I had no difficulty in giving a very serious prognosis, which was verified by death in seven days. It is remarkable that two days before her death she managed to walk, after a fashion, a few feet from the sofa to her bed.

The treatment consisted in attempts to introduce nourishment, and, in the way of medicine, the administration of a drop or two of tincture of opium every three or four hours, which soothed and had a beneficial effect on the vomiting and diarrhoea.

At the post-mortem the above facts received the following pathological explanation:—*Thorax*: On percussing the chest and abdomen prior to opening them, extensive cardiac dulness, and dulness and hardness of the hepatic and epigastric region, were marked. On opening the chest the pericardium was found very much distended, as if with a large quantity of fluid. This fluid turned out to be very thick greenish-yellow pus—what the old pathologists would have called laudable pus,—which welled up out of a little opening made, till occasionally the opening became plugged with lymph. I collected a tumblerful of it, and much more remained. There must have been at least two tumblersful altogether. Much purulent lymph then appeared adhering to the inner surface of the pericardium. The substance of the heart seemed pale and soft. The endocardium and the valves were unaffected. The lungs were congested and adherent to the side, but did not contain tubercle. There was a quantity of serum in the pleura, but not pus.—*Abdomen*: The liver was enlarged very much and universally congested. There was a good deal of straw-coloured fluid in the abdomen; but no other morbid appearance was noted.

Remarks.—I never saw pus in the pericardium before, and from what I can gather from books and physicians and pathologists of authority, the case is one of rare occurrence. Clinically, it is curious to notice that such a quantity of pus can accumulate in the pericardium without more distress of the circulation, without more acute local symptoms, and without the coexistence of acute rheumatism.

Dr. Wilks kindly sends me the following comments on