ORIGINAL COMMUNICATIONS.

CLINICAL ILLUSTRATIONS OF SOME DISEASES OF THE OESOPHAGUS.

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SIMPLE ULCERATION.

SIMPLE ulceration of the oesophagus presents the same character as that of the stomach. It generally commences in the mucous membrane; but it may arise in the submucous cellular tissue from abscess, from tubercular deposits, or from thickening occurring either above or below the point where it exists, from pressure by an enlarged oesophageal gland, by tumours pressing on the oesophagus, by aneurism, or by ossification of the rings of the trachea; from abscess of the lungs, or of the cellular tissue external to the canal; or in consequence of caries of the vertebra.

It is extremely rare to meet with more than one ulcer, unless where abscesses are immediately in contact: except when it arises from follicular inflammation; then the ulcers will be numerous. This last form of ulceration is only met with in acute oesophagitis.

Simple ulcers vary in size and shape. When small, they are generally oval or round; but when large, they are more or less irregular. Their depth and appearance will vary; the mucous membrane may be only destroyed, the submucous cellular membrane participating or not; the muscular substance being laid bare, or in part or wholly destroyed, leaving only the external membrane; or the walls of the trachea may be more or less destroyed. It rarely happens that the edges of the ulcer present indications of chronic thickening. A soft and spongy or somewhat infiltrated condition, with a state of vascular congestion of the surrounding parts, is the most frequent. When perforation into a cavity has taken place, they usually present all the characters of perforated ulcer of the stomach; namely, as if punched out.

The point of the canal opposite the bifurcation of the trachea is the most frequent position, and Albers (*Atlas der Pathologischen Anatomie*), has collected the following cases from various sources to prove this.

	Cases.	On the bifurcation.		Other situations.
		M.	F.	
Keppelhout . . .	2	2		
Sandifort . . .	1		1	
Kunze . . .	1	1		
Wade . . .	1	1		
Hecking . . .	1	1		
Albers . . .	4	4		1 external to the bifurcation.
Heister . . .	1			Position not named.
Baillie . . .	1			Position not named.

In eighteen deaths which he has also collected, the following were the ages of the patients:—

Ages.	Males.	Females.
From 1 to 10 years	1	0
„ 10 to 20 years	1	1
„ 20 to 30 years	1	0
„ 30 to 40 years	1	1
„ 40 to 50 years	2	0
„ 50 to 60 years	4	2
„ 60 to 70 years	1	0
„ 70 to 80 years	1	0

In two cases the age is not mentioned.

He remarks, that in three deaths before 20 years, two occurred in scrofulous subjects, and one in a tuberculous person.

The following cases have been collected by myself, some of those cited by Albers being unavoidably included:—

Age.	Sex.	Position in canal.	Terminations.
53	F.	Upper part.	Bronchitis, not caused by disease.
67	M.	Where it passed under aorta.	Exhaustion.
Adult.	M.	Opposite the bifurcation of trachea.	„
7	F.	Just above diaphragm.	Perforation into pleura.
7	F.	„	„
Adult.	M.	Just before passing to the right.	„
—	M.	Above the cardia.	„
—	M.	„	„
17	M.	Not named.	„
46	M.	Near centre.	Perforation of aorta.
51	M.	3 in. above cardia.	„
Aged.	F.	Not named.	„
Aged.	F.	Upper third.	Erosion of small vessels.
25	F.	Lower third.	Perforation of pericardium.
12	M.	„	Abscess of right lung.
58	M.	„	Ditto.
Adult.	M.	Not named.	Ditto.
54	M.	„	Ditto, and perforation of trachea.
50	M.	Middle third.	Ditto, ditto.
34	M.	Opposite fourth dorsal vertebra.	Ditto, and from it into pleura.
51	M.	Upper part.	Perforation of trachea.
55	M.	Above bifurcation of trachea.	Ditto: gastritis, and colonitis.
60	M.	Below bifurcation of trachea.	Abscess in walls, and perforation of trachea.
3	M.	Half an inch below bifurcation.	Perforation of right bronchus.
63	M.	„	„
12	—	Middle third.	Abscess in walls.
Adult.	F.	Opposite fifth or sixth dorsal vertebra.	Abscess in posterior wall, caries of vertebra.
52	F.	Just below bifurcation of trachea.	Abscess in walls.
66	M.	Upper third.	Abscess in post. walls.
60	F.	„	Destruction of thyroid gland; perforation of larynx.
—	F.	„	Narrowing below ulcer.
42	M.	„	„
36	F.	Lower third.	Narrowing above ulcer.
59	F.	Near cardia.	Two sinuses entering lungs.
Adult.	F.	Lower third.	Abscess below trachea, commencing with oesophagus and trachea.

In these cases, thirty-five in number, thirteen occurred in females, and twenty one in males: in one case the sex was not named.

CASE I. ULCERATION OF THE SUPERIOR PART OF THE OESOPHAGUS: DEATH FROM BRONCHITIS. F., aged 53, had good health until within the last eight months, when, after an attack of inflammatory affection of the throat, she began to experience a sensation as if a hair was arrested there. This produced constant hawking, nearly every minute, of clear mucus. The sensation increased in extent within the last four months; and she then observed that the mucus became streaked with yellow matter, and occasionally with blood. From the commencement, she had suffered from severe heat and dryness in the throat, and a constant desire for cold drinks. On the appearance of the blood, she began to experience difficulty in swallowing, particularly anything hard, or any stimulants or sour substances. Insensibly she got into the habit of taking none but the blandest kinds of food. During the last ten weeks, the quantity of fluid

hawked up had increased; and she found that, if she did not clear the throat well, the first mouthful of fluid was very apt to be rejected. For the last three weeks, cough had begun to trouble her, and her voice had become hoarse; and with the cough, for the last two months, there had been a rather copious expectoration. On examining the throat, it was pale, and covered with mucus; but, on her making an effort to swallow, it was seen to be red below. The right side of the œsophagus, below the thyroid cartilage, in the vicinity of the upper part of the trachea, on pressing with the finger, was painful, and hawking and retching were produced, followed by the ejection of about a teaspoonful of muco-purulent matter and mucus. The thyroid on this side seemed enlarged. The use of a strong solution of nitrate of silver, applied by means of a piece of sponge attached to a wire, was had recourse to: this seemed of considerable benefit, with milk diet. But she was seized with bronchitis, then very fatal; and she sank in four or five days.

A small ulcer existed in the œsophagus, of the size of a sixpence: the parts around it were vascular, and slightly thickened; the mucous and submucous membranes were destroyed, and some of the muscular fibres exposed. The trachea was, opposite the ulcer, red and vascular to the extent of a half-crown, and covered with muco-purulent matter; the chordæ vocales were thickened; and the thyroid was enlarged.

CASE II. ULCERATION OF THE ŒSOPHAGUS OPPOSITE THE BIFURCATION OF THE TRACHEA.* A gentleman had suffered for some weeks from gradually increasing difficulty in swallowing. Fluids met with an obstruction about the middle of the œsophagus, which retained them about a minute, and then rejected them, mixed with viscid purulent matter. After this had occurred twice or three times, the passage became clear, and they then descended in small quantities into the stomach. He sank soon after.

An ulcer of a spongy character existed in the canal, opposite the bifurcation of the trachea. The canal was so narrowed by it, that, although it was contained in a kind of pouch, the anterior wall of which was formed by the mucous membrane of the trachea, fluids could scarcely pass.

CASE III. ULCERATION, WITH OSSIFICATION OF THE HEART. M., aged 67,† until four months ago, had good health; he then began to suffer pain in swallowing, just as the food was entering the stomach; and, before it had been there long, to vomit it up. He was now much worse; food did not remain down more than two minutes. The pain was constant, extending outwards under the left false ribs; the pulse 100, feeble, and intermitting. Broth clysters were thrown up. He gradually sank, and died seven months from the commencement of the illness.

A large ulcer, two inches long and one inch broad, existed in the œsophagus, at the point where it passed under the aorta. Fluid existed in both sides of the chest, and the stomach was slightly inflamed. The substance of the heart was ossified; the ossification followed the course of the septum, from the base to apex; in some places it was two inches broad, and of unequal thickness. The pericardium was thickened, and adhered to the heart.

Baillie, in page 51 of his *Morbid Anatomy*, illustrated with plates, gives a drawing of a simple ulcer of the œsophagus, but no history of the case.

Billard (*Maladies des Enfants*) mentions the case of a female infant, seven days old, which was brought to the infirmary on the 2nd of May, with the members hard and oedematous. It had green diarrhœa, and nearly constant vomiting of glairy matters, with frequent regurgitation after drinking. The heart's action was weak, and the skin cold. On the second day, it vomited green liquid, and died the same evening. An ulcer existed at the lower extremity of the œsophagus, six lines long and four broad. The mucous membrane was destroyed, and the base of the ulcer was formed of cellular tissue alone.

ULCERATION, WITH PERFORATION OF THE WALLS OF THE ŒSOPHAGUS INTO THE PLEURAL CAVITIES.

CASE I. A female, aged 7,* had been brought up almost entirely on bread since she was weaned. She had been suffering for the last day or two from constant retching, pain in the epigastric region, and thirst. The abdomen was hard; the tongue clean and red. Demulcents, with mint tea and liquor opii sedativus, were ordered; and by the next day the retching was less severe. By the advice of a medical man, who considered her to be labouring under disorder of the stomach, an emetic mixture was given, and I ceased to see her. She sank thirteen days afterwards.

One inch above the cardia, an ulcerated opening, with smooth edges, existed, communicating with the left pleural cavity. The mesenteric glands were enlarged, but all the other viscera were healthy.

CASE II. F., aged 7,‡ of good general health, was seized with diarrhœa, which lasted several days. After dinner one day, she was seized with vomiting. During the night, fever set in, with severe thirst and faintness; next day, nausea and convulsions were joined, followed by extreme feebleness, violet hue of face, dilated pupil, burning skin, with very difficult and painful deglutition. She died thirty-six hours from the commencement of the vomiting.

In the œsophagus, from an inch and a half to two inches above the diaphragm, was an oval aperture, four-fifths of an inch long, and two-fifths of an inch broad. The right side of the pleura was filled with a brown fluid, in which floated dark green flocculent shreds.

CASE III. A man§ much addicted to drink had a relapse from delirium tremens, and died suddenly in a convulsive fit. For a year before his death, he had suffered from dyspeptic symptoms, for which many remedies had been taken in vain. During the last two days, he had had several loose motions. On the morning of the day of his death, he awoke, after a good night, quite free from dyspepsia; at two P.M. he fell into a convulsive fit, and died three hours afterwards.

In the œsophagus, immediately before its transition to the right, an opening, about the size of a crown-piece, existed, with smooth edges, communicating with the pleural cavity, which contained from twelve to sixteen ounces of brown fluid. The pericardium adhered to the heart. The liver was large, grey, and soft. The arachnoid was thickened: both it and the ventricles contained some fluid.

Mr. T. W. King, under the head of Digestive Solution of the Œsophagus (*Guy's Hospital Reports*), has published the case of a man suffering from diabetes, who died in a convulsive fit. At the *post mortem* examination, one side of the œsophagus, just above the cardia, was found eroded. He does not state the aspect of the perforation, whether it presented the characters of an ulcerative one, or of one arising from digestive solution.

Dr. Copland has recorded a case of a young man of drunken habits, who died after suffering a few days from symptoms of affection of the œsophagus. A perforated opening was found near the cardia. I quote the case from memory. In his remarks on the subject, he considers the case of Mr. King to have been analogous.

CASE IV. A student, aged 17,§ of weak constitution and contracted chest, was seized with severe discharge of blood from the mouth, which, after placing his life in great danger, declined. Pus mixed with blood was then excreted. This again was followed by spitting of blood, which lasted two months. After this, copious and frequent discharges of blood from the nose came on. He had also a burning pain above the left orifice of the stomach, which resisted every remedy that was employed. Respiration was always difficult, and he could lie only on the right side. He sank gradually.

In the œsophagus, two inches above the diaphragm, an

* Thillow, in *Baldinger Neues Magazin für Aerzte*, 1790.

† Guersant, *Dict. des Sciences Médicales*, Case rare, tome xiv, 214.

‡ Heyfelder, in *Med. Annalen*, 1838.

§ Heister, in *Acta Natur. Cur. Obs.*, clxxiii.

* Watson, in *Hewship's Practical Observations on Indigestion*, p. 8.

† Dr. Simmon, in vol. i of *Medical Communications*.

aperture existed, an inch in diameter; and through this the fluid found in the chest must have made its way, as it smelt strongly of cordial water.

ULCERATION WITH PERFORATION OF THE AORTA, SMALL VESSELS, AND PERICARDIUM.

CASE I. PERFORATION OF THE AORTA. M., aged 46,* on the 30th of April, 1837, after indulging freely in beer, drank a considerable quantity of ardent spirits. The next morning, he felt generally indisposed, with pain in the breast and stomach. An emetic gave him considerable relief. On the 2nd of May, he complained of loss of appetite, severe thirst, and severe pain under the sternum, accompanied with slight cough. On the 6th, difficulty was experienced in swallowing; and, at a spot in the upper third of the canal, fluids seemed to regurgitate before descending into the stomach. Leeches and demulcents were ordered. The symptoms continued up to the 19th with little alteration, except an evening exacerbation, when a small quantity of blood was brought up. On the 20th, it amounted to four pounds. Blood was also passed by stool. He sank the same day.

In the œsophagus, near its centre, a small ulcer existed, surrounded by traces of inflammation. The ulcer was half a line long and three lines broad: it had penetrated the aorta at the point where the left carotid was given off.

CASE II. M., aged 51,† a week previously first complained of deep seated pain at the top of the sternum, shooting to the spine. One hour before being seen, he had had profuse hæmorrhage, of a bright frothy character, from the mouth. Acetate of lead was given internally, and ice was applied to the chest. The next morning, his pulse was 100, small; the respiratory murmur was deficient, with dullness on percussion in the upper part of the left lung. Half an hour after this, he had a return of the hæmorrhage, which proved fatal.

In the œsophagus, three inches above the cardia, a circular opening existed, three and a half inches in diameter, with smooth edges. Below it, an irregular erosion existed, involving partly the œsophagus, and partly the stomach. In the aorta, at the point where the descending part of the arch terminated, and corresponding with the first named ulcer, but somewhat higher, an irregular opening, with jagged edges, was found. The walls of the artery were much thinner at this point than at any other; and, half an inch lower down, an atheromatous patch existed, the centre of which was in a state of ossification. A free communication existed between the aorta and the œsophagus. The stomach was distended with a large coagulum of blood. The duodenum contained loose coagula, and the rest of the intestinal canal contained blood in a fluid state. In the upper part of the left lung, some crude tubercles existed.

Van Doveren mentions the case of an old woman, who died from discharge of arterial blood from the mouth. An ulcer was found in the œsophagus; it had penetrated the aorta. The stomach was distended with fluid blood.

In the following case, the hæmorrhage came from small vessels:—"An aged female", says Dr. Copland, in his *Dictionary* (art. *ŒSOPHAGUS*, page 912), "had been under my care for years, for disordered digestion, accompanied with psoriasis. A few days before death, she was attacked with symptoms of œsophagitis and pharyngitis, attended by a constant hacking cough, and great depression of strength. On the eighth or ninth day of the attack, sudden and profuse hæmorrhage from the throat occurred, without any effort: death followed. The stomach contained a pint and a half of blood, partly fluid, and partly coagulated; and the mucous membrane was softened. The pharynx was of a dark colour, with purple coloured patches. In the upper third of the œsophagus, towards its anterior, on the left side, an irregular ulcer existed; it had destroyed the mucous and submucous coats, and in some parts the muscular. The parts around the ulcer were soft, tumid, and of

a purple hue. The bottom of the ulcer was red and vascular. Hæmorrhage had occurred from erosion of the small vessels."

CASE III. ULCERATION OF THE ŒSOPHAGUS PERFORATING THE PERICARDIUM. F., aged 25,* a servant, entered St. Mary's Hospital, under Dr. Chambers, January 23rd, 1852. Her face was anxious and pale; her conformation good; yet she was weak and reduced. She menstruated regularly. Three months back, she began to suffer from nausea, and to vomit frequently after meals. At the end of a month, difficulty in swallowing manifested itself, which had increased, with an aching, digging pain between the shoulders, and occasionally pain in the epigastrium. A piece of dry bread, on being swallowed, met with an obstruction near the top of the sternum. The pulse was 80; the tongue slightly furred; the skin cool; the bowels and urine natural. The back of the pharynx was slightly abraded. The matters vomited were frothy and acid. The respiratory murmur was deficient, though loud and coarse. In this state she continued up to the 2nd of March, when she had constant cough. The next morning, she was found pulseless, with livid lips and face. She died soon afterwards.

The pericardium was found distended; and, on puncturing it, air made its escape, followed by a thin, yellow, sour-smelling fluid. The œsophagus, from the bifurcation of the trachea to within half an inch of the diaphragm, was, in its whole circumference, the seat of ulceration. An opening communicated with the pericardium; and a little lower down was another, which opened into a small ulcerated cavity, at the root of the lung. The stomach was placed in a vertical direction; its pyloric extremity being situated an inch below the superior spinous process of the ilium.

ULCERATION OF THE ŒSOPHAGUS TAKING PLACE FROM WITHOUT.

CASE I. FIBROUS TUMOUR ATTACHED TO THE ARCH OF THE AORTA.† M., aged 68, robust, an agricultural labourer, had suffered for three months from difficulty in swallowing, with severe pain, which compelled him to return that which he had taken. This difficulty was greater with solids than with fluids. He had a constant sense of constriction at the upper third of the sternum; here the obstruction to swallowing existed, and here pain was excited. He had no fever nor cough. By a milk diet, he was much restored. At the expiration of two months, he again returned, with hectic cough, and purulent expectoration. For some days, the deglutition had been quite easy. He sank in the course of a few days.

Adhering to the arch of the aorta, a fibrous tumour, impregnated with pus, was found, which pressed on the œsophagus. The œsophagus, for two fingers' breadth at this point, was quite destroyed, except a very thin layer. The lungs were filled with grumous and ichorous matter.

CASE II. ENLARGEMENT OF THE THYROID GLAND: ULCER: PERFORATION OF THE TRACHEA. F., aged 51,‡ from her youth had difficulty in deglutition, from some obstruction in the neck, rendering the introduction of an instrument necessary at times. The difficulty now became so great that fluids and sopped bread only could be made to descend. Solids did not produce pain; their descent was simply impossible. The thyroid, and the glands of the right side of the neck, were swollen and hard. Remedial measures had no influence on the affection. Low fever set in, accompanied with œdema. Viscid fluid flowed constantly from the mouth. A troublesome cough manifested itself; it was first dry, then with sanguine foetid expectoration, and accompanied with great anxiety in the chest. At last, fluids, when taken, excited severe coughing, and she soon sank.

The glands on the right side of the neck were hard, and of the size of walnuts, closely adhering to the internal

* Horning, in *Gösterreich. Med. Jahrbucher*, 1845.

† Flower, case reported to the *Medico-Chir. Soc.*, June 7th, 1853.

* Transactions of the Pathological Society of London. Session 1851-52.

† Girelli, cited in *Annali Universali di Medicina*, 1833.

‡ Sandifort, *Mus. Anatomica*, lib. 1, tab. cvi, fig. 3.

jugular vein. On section, they were found to contain a soft granular substance. The thyroid was hard and tuberculated, and at one point it had pressed on the œsophagus, and narrowed its diameter. Above this point, the œsophagus was considerably dilated; it was livid in colour, and its tissue was soft and spongy. On its being cut, foetid sanguinous fluid issued, like that expectorated during life. Several ulcers existed; and at the lower part of the cricoid cartilage was one which communicated with the trachea.

ABSCESSSES OF THE OESOPHAGUS RESULTING FROM OR ENDING IN ULCERATION.

CASE I. M., aged 66,* of robust health, contracted a severe cold, with inflammation of the throat. Deglutition became difficult, and soon impossible. This state was attended with fever. When seen seventeen days from the commencement of the attack, there was but slight redness of the throat. The lower part of the pharynx, although not swollen, was very tender on pressure. The food was rejected, mixed with much slimy mucus. Bleeding, leeches, and calomel, produced no favourable effect. A little pus mixed with blood was hawked up; but this gave no relief to the symptoms. He began to cough up a large quantity of foetid pus, and sank twenty-four days from the commencement of the attack.

The œsophagus was found to contain much foetid pus, which oozed through an ulcerated opening, communicating with an abscess behind it and the lower part of the pharynx.

CASE II. A lady,† while suckling her first child, began to complain of obtuse pain between the shoulders and in the præcoria, and at last of cardialgia, with pain of a like character in swallowing. At times she rejected her food, with viscid mucus, the moment it reached the point where the pain existed. She was advised to discontinue suckling, and take bland emetics and purgatives. By these measures, much benefit was produced; so that she was enabled to get down a little very finely chopped meat. The improvement, however, was only temporary. Various other remedies were had recourse to, but to no purpose. She had at last vomiting of thin blood with the food. Slow fever followed, and soon afterwards she died.

Opposite the fifth or sixth dorsal vertebra, an abscess existed. The œsophagus was ulcerated, and the posterior part of the lung was sphacelated. The liver was soft, and the pelvis of the kidney contained pus.

CASE III. A man,‡ whose health until February of 1849 had been good, began to feel pain in the middle of the sternum on swallowing. This increased, and very soon became constant; deglutition of solids became impossible, and that of fluids was attended with more and more difficulty, and at last they were quite arrested. Some weeks after this, while making an effort to swallow some fluid, some pus and blood was brought up: this occurred again, and the deglutition of fluids became possible. He went on improving, and was soon able to swallow solids. In September, in consequence of taking cold, the difficulty in swallowing returned; and he had a sensation as if a sore spot existed in the œsophagus. The appetite failed, and he lost both flesh and strength. The swallowing of fluids soon became difficult; and, by the 28th of October, the attempt to swallow the smallest quantity excited sudden and severe cough. He sank on the 3rd of November.

The glands of the œsophagus were hard and enlarged. In the canal, an inch below the division of the trachea, an opening, of the size of a fourpenny piece, existed, which communicated with the left bronchus. The pleura on this side was adherent.

CASE IV. ABSCESS IN THE WALLS OF THE OESOPHAGUS, FOLLOWED BY ULCERATION. A child, between 12 and 13,§ whose health had been previously good, was taken in the

commencement of December 1807 with a severe cough, and great difficulty of breathing on the slightest exertion. To these, fever of an irregular character was soon added. In the beginning of February, the cough was constant, and the fever doubled in intensity. On the 3rd, the oppression and suffocative sensation were very severe; the pulse was very rapid; the expectoration glairy and transparent. No trace of opacity was observed until the end of the month, when it became opaque and purulent. The epigastrium was rather tender, and the abdomen often voluminous. The emaciation was severe and increasing; the abdomen became hard, and the fever constant; and, for three days before death, she vomited incessantly black matter, like that from cancer of the stomach. She died on the 6th of March.

The œsophagus contained black fluid; on its posterior and lateral aspects, it was pierced by two round ulcerated openings; these communicated with a sac, the outer wall of which was formed by the external covering of the œsophagus. This sac adhered to the inferior, posterior, and interval of the right lung, and below rested on the liver. It still contained some of the fluid like that in the œsophagus, and which had been vomited. The lung of this side was small, and contained several small tubercles. Several of the bronchial glands, below the bifurcation of the trachea, were of the size of pigeons' eggs, but not in a state of supuration. The great omentum was covered with tubercles.

CASE V. ULCER FOLLOWED BY ABSCESS IN THE WALLS OF THE OESOPHAGUS. A. F., aged 52,* delicate, became in the winter of 1782 much troubled with dyspepsia, and when seen in the following February (1783), she had nausea, with frequent retching and difficulty in swallowing; by emetics and purging, considerable relief. On the 28th, the difficulty of swallowing returned with a sense of suffocative constriction in the throat; this was somewhat relieved by foetid julep. By the 26th of March, the pain and difficulty in swallowing was very severe, all taken being returned. Two ounces of quicksilver, swallowed, seemed to clear the passage for a short time. The same night she had a rigor, and she retched all food even after it had entered the stomach; the pulse was small and quick. If she took a large quantity of fluid, it seemed to make its way by its weight into the stomach, but a small quantity was rejected before reaching it. Porter agreed better with her than anything else. She now became better for some weeks; but on the 25th of April she had another attack. After swallowing the same amount of mercury as before, with other remedies, she again passed a month of comparative ease. At the end of this time she had another attack, followed by profuse discharge of saliva from the mouth, to the amount of a pint and a half in twenty-four hours. She became much reduced, and had constant pain in the side; her stools contained at times a slimy matter, after the discharge of which, the flow of saliva from the mouth was much lessened. Some calomel was given without any increase of saliva. In July, rigors appeared, and the pain in side increased much in severity; the pulse sank, and she vomited all food; constant fever with severe thirst were also present. Broth clysters were given; she at last sank into a state of stupor, and died at the end of twenty-four hours.

The *post mortem* examination was made by John Hunter. In the walls of the œsophagus, below the division of the trachea, an abscess existed, communicating with the canal, which was ulcerated to the extent of four inches. The stomach was contracted, and contained some green fluid like bile.

ULCERATION OF THE OESOPHAGUS WITH PERFORATION OF THE TRACHEA, BRONCHI, OR AFFECTIONS OF THE LUNGS.

CASE I. ULCER OF THE OESOPHAGUS: PERFORATION OF THE TRACHEA: ABSCESS IN RIGHT LUNG. M., aged 50,† entered St. Thomas's Hospital in February 1781. He had been suffering for a few days from difficulty in swallowing: the

* Berlin Med. Zeitung, 1842.

† Zeisner, *Rarus Oesophagi Morbus*, in Haller's *Disput. ad Morb.*, lib vii.

‡ Berlin Medicinische Zeitung, 1849.

§ Halle, *Bibliothèque Médicale*, tome xx.

* Garthshore, *Medical Communications*, vol. i.

† Keir, in *Medical Communications*, vol. i.

food met with some obstruction near the middle of the sternum, and in less than a minute was rejected; and with fluids, severe cough was excited. The breathing was difficult, and he had had cough for some months duration, with copious expectoration of pus; the breath was foetid; he had frequent shivering fits; the pulse was strong and hard; he was bled and blistered, but he sank ten days from the commencement of the difficulty in swallowing.

In the upper part of the right lung a large cavity existed: it had destroyed the substance of the œsophagus, from the first to the third or fourth dorsal vertebra. An opening existed between the œsophagus and trachea, half an inch in size. The œsophagus, stomach, and trachea all contained pus.

CASE II. ULCERATION OF THE ŒSOPHAGUS COMMUNICATING WITH AN ABSCESS IN THE RIGHT LUNG. M., aged 58,* much exposed to sudden variations of temperature, and in the habit of drinking largely of spirits, although not to intoxication. Until he reached the age of 55 his health was good; he then became subject to a troublesome cough with mucous expectoration tinged with blood, and the pulse was full and hard. Blood was taken; cough mixture was given, and he was ordered to abstain from drink. Pain in the præcordia soon after came on when swallowing solid food, and increased in severity; the cough also returned. Various remedies were given, and at last mercury; this was followed by great benefit, and he soon was able to swallow with ease, and for a year he continued well. The cough then returned, attended with a sense of uneasiness and pain in the right side; the pulse was full and hard; the bowels constipated; the appetite gone. Leeches and laxatives were used; the last produced much relief. Difficult deglutition soon manifested itself; the food was rejected mixed with mucus, and even fluids soon ceased to pass. The exhibition of mercury was now unattended with any benefit, and he gradually sank.

The œsophagus, in the lower part, for four fingers breadth in extent, was hardened and in close connexion with the right lung; in the upper part it was much dilated and presented a great number of large mucous glands. The thickened part presented an opening communicating with a cavity in the right lung, which would admit the passage of the little finger.

CASE III. ULCERATION OF THE ŒSOPHAGUS WITH PERFORATION COMMUNICATING WITH A CAVITY IN THE RIGHT LUNG. A man† was severely squeezed in the neck by one of his comrades. For some days after, he had slight difficulty in swallowing; this gradually increased, and at the end of four months solids would not descend: at this time he took cold, and his voice became affected. On his admission into the hospital, fluids only would pass, and these only with very great precautions, otherwise cough was excited and they were returned. A bougie was arrested opposite the first ring of the trachea. He had frequent cough, with a copious expectoration, like the little round masses met with in chronic laryngitis. The respiratory sounds were feeble on both sides, yet no positive disease could be said to exist. He had no fever; his appetite was good; he had not lost much flesh, although his strength was reduced. Milk was his sole nourishment. A slight febrile indication soon afterwards set in; he had constant headache, the voice became nearly extinct, and the emaciation increased. Three days before death he had delirium; the fever doubled, with great agitation; the next day the agitation was less, but the delirium continued; the pulse was soft and compressible; in the evening it became small and intermittent, and the face pinched, and he sank the next morning at 5 A.M.

Serum existed under the arachnoid, but none in the ventricles; the veins of the surface were gorged, and the substance of the brain was soft but not discoloured. The œsophagus was narrowed so as scarcely to admit a female catheter. The obstruction was two and a third inches in length, and formed of soft fungoid-like vegetations; the mucous membrane was destroyed. In the centre of this ulcer two openings existed

of nearly the same size, capable of admitting a female catheter, separated from each other by a thin layer of membrane. These openings ended in a canal, large at its commencement, which ended in an excavation the size of a hen's egg in the upper part of right lung, and which contained a little purulent fluid. This cavity was not lined by a false membrane; the surrounding tissue was infiltrated, and several small bronchial tubes opened into it. The right lung was adherent and increased in density from capillary bronchitis, the left with sanguinous infiltration, in the superior lobe: in the inferior, three black cysts of the size of nuts existed. The larynx and trachea presented no change. The liver was gorged, and contained five or six pea-like, grey bodies. The kidneys were also gorged.

CASE IV. ULCERATION OF THE ŒSOPHAGUS, PERFORATION OF TRACHEA, AND ABSCESS IN THE RIGHT LUNG. M., aged 54; health good. In December 1821, his appetite began to fail; he had flatulence and heartburn, with pain and uneasiness after eating, accompanied with spitting of frothy mucus. In the following January, he experienced a difficulty near the stomach in swallowing food. This symptom gave him very little trouble until May, when it became severe; some kinds of food exciting it more than others, large quantities of fluid being necessary to make it descend. Ropy mucus was also discharged by retching from the gullet. He began now to suffer from an uneasy sensation in the upper part of the right side of the chest, extending into the axilla. A probang passed with ease into the stomach, but it was followed by a great increase of pain in the præcordia and in the chest. By the 24th of July, he had lost much flesh, and his pulse had become quick. On the 1st of August, after more than usual fatigue from business, he had in the night a febrile attack, with severe pain in the upper part of the right side of the chest, shooting to the back. No cough. Pulse 100, full. He was bled and blistered, and had antiphlogistic diet. On the 6th, cough manifested itself, particularly on taking food, but seldom at any other time, except at night, when it was very troublesome, and attended with a little frothy mucous expectoration. He seemed, up to the 24th, to make some slight improvement; but on that day he had a severe shivering fit, followed by fever, and great increase of the pain in the chest. Deglutition was at times very difficult, and the cough most distressing. On the 26th, nothing would pass; cough very severe; pulse 112, strong. An elastic tube was introduced, but it would not pass lower than the upper part of the sternum. A catheter descended somewhat lower. Some beef-tea was injected through it, but it produced violent cough and threatening suffocation. In the night, the power of swallowing returned, and he took without difficulty a pint of chocolate. The cough continued very troublesome on taking liquids, and most offensive purulent matter was expectorated. On the 28th, he was sometimes able to swallow, at others not; little of whatever was taken reaching the stomach. In the evening, he discharged a portion of slough by expectoration. Pulse 96; skin hot and dry. There was but little alteration in the symptoms up to the 1st of September, when he sank. He had lost flesh; his tongue had become dry; the purulent expectoration had diminished, but he passed it in his motions; but the retching and sickness continued very severe, yet nothing was brought up. During the last twenty-four hours of life, he had been able to swallow; and even brandy and water could be taken without exciting cough.

The right lung, in its upper and posterior part, contained a large abscess; the œsophagus and trachea forming a portion of its walls. The œsophagus was destroyed in one-half of its circumference, to the extent of four inches in length. An opening existed in the trachea, from half an inch above the bifurcation to the same distance below it, on the right bronchus. The tissue of the lung was condensed around the abscess. In the œsophagus, a line of tubercles, of the size of split peas, existed under the mucous membrane; below this, near the cardia, a large

* Blenlaud, *Icones Anat. Pathologicae*.

† Vigla, in *Archives Générales de Médecine*, 1846.

* Hay, in *Transact. of Medico-Chir. Society of Edin.*, 1824.

tubercle was situated on the external part of the canal. At the point of junction of the stomach and œsophagus, an irregular mass of hardened glands existed, which compressed the opening, yet admitted the passage of the little finger with ease. The other viscera were healthy. During the latter period of life, he was nourished by beef-tea enemata.

CASE V. ULCERS OF THE ŒSOPHAGUS, COMMUNICATING WITH CAVITIES IN THE RIGHT LUNG. F., aged 12,* entered the Hôpital des Enfants, September 12th, 1840. She had had scarlet-fever in July; the eruption disappeared, yet the fever increased, and was attended with pain in the right breast. She soon began to expectorate purulent foetid matter. She had foetid breath, with vomiting and retching, and great emaciation. To these symptoms, after her admission, diarrhoea was joined. The stethoscope gave indications of a cavity in the right lung. On the 16th, after coughing, she brought up ten drachms of venous spumous blood, with a gangrenous smell: the same occurred on the following day. She sank on the 21st, after suffering from severe pain in the right side of the chest.

In the median line of the œsophagus, near its centre, four ulcerated perforations existed; the superior one was longest: they communicated with a cavity in the right lung, capable of holding a small apple; this again communicated with a second, of the size of a plum, in the superior part of the lung; and this one communicated with another half its size. The first cavity was lined with a false membrane, and both it and the second contained flakes of grey pulmonary substance, with foetid grumous fluid, of a gangrenous odour. Into the second a bronchial tube opened; it, as also did the smaller cavity, contained some dark clots of blood, mixed with caseous matter. Other cavities, but isolated, existed, containing dark gangrenous diffuent matter, and, in other parts, tuberculous infiltration. The bronchial glands were large and black.

CASE VI. ULCERATION OF THE ŒSOPHAGUS, COMMUNICATING WITH ABSCESS IN THE RIGHT LUNG, WITH PERFORATION OF THE PLEURA. M., aged 34,† had good health up to January 1833, when he began to vomit his food a quarter of an hour after it had been taken, if it consisted of solids: this was accompanied by pain in the upper part of the epigastrium. Some pills, which he obtained from a medical man, so far relieved him, that the affection ceased to trouble him, except when he took solids. On the 27th of June, he entered the Klinik at Bonn. His aspect was somewhat yellow and emaciated; tongue white, and mouth overflowing with mucus; and he complained of a kind of sticking pain in the upper part of the epigastrium, extending to the sides. Respiration was noisy in the subscapular region, with dulness on percussion; but he had no cough. Swallowing was followed by constriction in the breast, and a sensation as if some obstacle existed in the dorsal region to the descent of the morsel, which did not make its way into the stomach until eructations and discharge of water had taken place. A probang was introduced to the extent of nine inches, and, on being withdrawn, the sponge was found covered with viscid mucus. Hunger was very great; the thirst moderate; the bowels constipated; and the urine yellow with sediment. The motions obtained by laxatives were black. The pulse and skin were natural. Leeches, belladonna, clysters, and milk diet were used. On the 30th, he complained of severe pain in the right breast. On the 14th of July, the belladonna affected his throat and eyes; and on the 17th he passed a bad night, from a troublesome cough. Dulness on percussion, and deficiency of respiration, on the right side of the chest were observed. On the 25th, the pain had not increased, but it had extended more towards the sternum. On the 7th of August, a sound was introduced, and produced severe pain in the vicinity of the cardiac orifice of the stomach; and the cough now excited

retching. On the 12th, the pain and cough were very severe; and on the 14th he had diarrhoea, with pain in the upper part of the abdomen, increased by pressure. The urine was scanty. On the 15th, the cough was worse; the urine scanty, and dark red; the pulse 100, hard and small; the pain in the chest was severe. Pleuritic symptoms being evident, six ounces of blood were taken by cupping, but without relief. On the 17th, he had muco-purulent expectoration, frequent retching, and severe dyspnoea. Pulse 120, small. On the 21st, the pain and dyspnoea were much increased, with ægophony in the right mammary region. Death took place on the 25th.

The œsophagus was ulcerated from opposite the fourth dorsal vertebra to near the cardiac orifice of the stomach. In its upper part, an opening, two inches in diameter, communicated with a cavity in the lower lobe of the right lung, six inches long and four broad, containing black foetid fluid: this again opened into the right pleura. The pleura was adherent, and contained about four pounds of yellowish white fluid, of a sour foetid smell, with oil-globules and pieces of fat floating in it. The upper lobe was infiltrated with red serum; the lower part of the middle lobe crepitant, but would not float in water; the lower, in the vicinity of the cavity, was soft and infiltrated; it also contained a small cavity, of the size of a nut, filled with yellow fluid. The pericardium contained five or six ounces of fluid; the heart was normal. The cardiac opening of the stomach was quite free; but the mucous membrane was swollen, with some traces of ulceration. The liver was very large, extending to the left side.

CASE VII. M., aged 12, of a somewhat scrofulous habit, while playing with some schoolfellows, swallowed a piece of slate-pencil; about half the length of the finger, with a piece of thin string attached to its centre. Some efforts were made to extract it by himself; but these not succeeding, they took him to a surgeon, who, after making an attempt to withdraw it, pushed it with an instrument into the stomach. Severe pain was excited, and some retching of mucus and blood took place. He ate his dinner without much difficulty, after the first two or three mouthfuls; and he had a slight sensation of soreness, which, for the next seven or eight days, continued much in the same state. The swallowing was rather better; but he had great difficulty in swallowing dry bread, which seemed to meet with some obstruction near the lower part of the breast-bone: it was deep seated, and attended with a kind of agonizing sensation in the spine. In this state, the first fifteen days after the accident were passed. He then began to complain of a pain in the right side of the chest, and to suffer from slight feverishness, accompanied by an unusual amount of thirst. The pain in swallowing also increased, and he had also slight nausea, with a tendency to retch. He now fell under my notice. There was absence of respiratory murmur at the point where pain was complained of; but this was more distinct posteriorly than anteriorly; and here, both above and below the point, some crepitation could be detected. He had also slight cough, with dark expectoration. The pulse was quick and small. Leeches were applied to the seat of pain; milk diet, and small doses of calomel and opium were ordered. For a week after, he seemed to improve slightly; the pain was rather less; the cough was not quite so severe; and the fever was somewhat diminished; but the thirst continued. At the end of this time, he had a distinct rigor one evening; and, four days after, he began to expectorate foetid purulent matter. This increased in quantity; the cough became more distressing; and the voice was affected. He had now constant sense of chilliness; his cheeks were livid, his eyes sunken and brilliant. A cavity was detected in the right lung. When pus appeared, the pain in swallowing increased; and fluid, if taken too rapidly, excited retching and vomiting. A constant sense of distressing constriction existed in the upper part of the throat. Ten days before death, after drinking a large teacupful of fluid to allay the thirst, severe vomiting was excited, and foetid pus was brought up. From this moment, fluids taken seemed to pass partly into the chest, and partly into the stomach;

* Bordet, Sur la Gangrène Pulmonaire. Arch. Gén. de Méd., 1843.

† Heeking, Diss. de Perfor. Œs. Ulcerat. Bonnæ, 1834, in Albers' Atlas der Pathologischen Anatomie.

but they did not immediately excite cough. His bowels became relaxed; his stomach very irritable; and he had tenderness in the epigastric region; and he died.

In the lower third of the œsophagus, an ulcer, three-quarters of an inch in length, and half an inch broad, existed. The mucous membrane, to the extent of three-quarters of an inch in circumference, was dark, and easily raised; the sub-mucous and muscular tissues were softened. From the centre of the ulcer, an opening, which would just admit the point of the little finger, passed into an abscess the size of a moderate sized orange, the walls of which, formed by the substance of the lung, were soft, and infiltrated with pus. The mucous membrane of the lower part of the œsophagus was vascular and swollen; that of the stomach was the same; and that of the small and large intestines was highly vascular in parts. In the liver, several small specks of pus existed, surrounded by vascularity. The kidneys were red and vascular; in the pelvis of the right one, a trace of pus existed. In the upper lobe of the right lung, some tubercles existed, in a softened state; the left lung was highly congested; and here and there some red nodules existed, varying in size from a pea to a walnut, as if from deposit of pus.

CASE VIII. ULCERATION OF THE ŒSOPHAGUS: PERFORATION OF THE TRACHEA: GASTRITIS, AND COLONITIS. M., aged 55,* entered the hospital in June. Some weeks before, when tipsy, he had fallen against some sharp body. This was followed by pain in the upper part of the right side of the thorax, and difficulty in swallowing solids. Leeches and blisters removed the pain, but the difficulty in swallowing remained. A small tube was passed down into the stomach with some difficulty, from meeting with some resistance in the upper part of the sternum. On withdrawal, its orifice was found filled with puriform mucus mixed with blood. He left the hospital, and during the next two months the dysphagia increased, and he was reduced to live on milk with bread reduced to pulp. At the end of August he re-entered. Two attempts were made to pass a catheter, but without success; but a third succeeded. Some solution of nitrate of silver was introduced on a sponge attached to a piece of wire. Cough soon came on, with hawking up of glairy pus mixed with blood. On the 25th of November, in a fit of coughing, he brought up what was supposed to be a piece of slough; and from this moment no fluid could be introduced. An attempt was made to pass a catheter, but it failed. On injecting a little water through it into the gullet, it was rejected, and severe cough was excited, with expectoration of bloody mucus; and any attempt to swallow was followed with the same results. On the 28th, a tube was passed with much difficulty twice: after this it was passed frequently. Symptoms of gastritis set in, and he sank on the 14th of December. The œsophagus, above the bifurcation of the trachea, was ulcerated and thickened to the extent of four inches, and an opening the size of a shilling existed midway between the larynx and the lower part of the trachea. Below this point, the canal was red. The mucous membrane of the stomach and the colon, as low as the sigmoid flexure, was inflamed. The mucous membrane of the trachea, both above and below the opening, was highly vascular, and covered with purulent mucus. Some traces of recent inflammation existed in the right pleura.

CASE IX. ULCER OF THE ŒSOPHAGUS, COMMUNICATING WITH ABSCESS, AND WITH THE TRACHEA. M., aged 60,† a baker, for the last ten years much addicted to spirits, became in the course of August 1833 subject to an attack of catarrh, which was followed by difficulty in swallowing. Food seemed to meet with some obstruction, and this particularly if he swallowed it without being well masticated; considerable pain was also produced. On the 1st of September, the food began to be returned, mixed with a large quantity of mucus, and he was much troubled with a

dry cough; particularly on swallowing fluids, which, however, met with no difficulty or obstruction. The bowels were constipated; and the pulse was varying, at times full, at others small. Tartar emetic was applied externally, and mercury given internally, much relief following. In the middle of October, the pain and cough became much worse, from a piece of potato of the size of a pea being arrested. At the end of twenty-four hours it was got rid of; and by the end of the month he was enabled to swallow without much difficulty. But on the 9th of November the difficulty in swallowing returned; severe cough set in some moments after food had been swallowed; and the food was also returned mixed with slimy mucus. The next day he had mucous expectoration with the cough; and towards the end of the month, he never coughed without bringing up particles of food taken some time before. His health began to sink. Three days before death, which took place on the 20th of December, all he attempted to swallow was returned with severe coughing.

In the œsophagus an ulcer existed, three inches long and two inches broad: in the centre of it was an opening capable of admitting a bean, communicating with an abscess, which opened also into the trachea by two openings of about the size of beans; the superior one an inch above the bifurcation, the other four lines below, in the right bronchus.

CASE X. ULCERATION OF THE ŒSOPHAGUS, WITH PERFORATION OF THE RIGHT BRONCHUS. M., aged 3,* entered the Hôpital des Enfants, May 22, 1823. He had suffered from cough for six months. Of late it had been of a convulsive character, but was now somewhat better: he had also been subject to diarrhoea, and was now suffering from it. He had sweats, anorexia, and great difficulty in swallowing fluids, from its producing severe cough. There was mucous râle in the post part on the right side of the thorax, and the voice was hoarse. The diarrhoea again stopped; but it returned again on the 25th, with great increase of the cough, severe thirst, and death.

In the œsophagus, a quarter of an inch below the bifurcation of the trachea, an ulcerated opening two lines in diameter existed, communicating with the right bronchus.

CASE XI. ULCERATION OF THE ŒSOPHAGUS, WITH PERFORATION OF THE RIGHT BRONCHUS. M., aged 63,† since youth addicted to drink, swallowed in a fit of drunkenness some pieces of glass. Some months after, he began to complain of a pain in the breast, which continued for some time, and then became more severe, and of a burning character, attended with difficulty in swallowing, from the food meeting with some obstruction near the ensiform cartilage. Four months later, he began to suffer from cough; and afterwards the swallowing of fluids or solids excited it, and they were returned mixed with slimy mucus. The breath was unaffected. He died in one of the fits of coughing.

In the œsophagus, an ulcer the size of a five shilling piece existed; and from it an opening of the size of a four-penny piece passed to the right bronchus.

ULCERATION DEPENDING ON CHRONIC INFLAMMATION OF THE CANAL.

CASE I. CHRONIC INFLAMMATION: ULCER: DESTRUCTION OF THE THYROID GLAND, AND PERFORATION OF THE LARYNX. A female, aged 60,‡ from a cold, became subject to difficulty in swallowing, which remained much in the same state for fifteen months; then pain occurred, with hawking up of a viscid substance. In spite of treatment, the disease gained ground; her voice became sharp and whistling, and the expectoration tinged with blood; at last it was only with the greatest difficulty and pain, and in a certain position, that fluids could be made to descend. The pain was referred to a spot a little below the thyroid cartilage. The fluid expectorated consisted first of altered blood with a peculiar foetid smell, and then of pure pus. She had constant burning thirst, and great emaciation: low fever at last set in, accompanied with delirium, which was followed by death.

* Lindesay, Transactions of the Medical and Physical Society of Calcutta, vol. viii.

† Hecking, Diss. de Perfor. Œs. Ulcerat., Bonnæ, 1834, in Albers' Atlas der Pathologischen Anatomie.

* Leblond, Thèse de Paris, 1822. No. 196.

† Albers, Atlas der Pathologischen Anatomie.

‡ Taranget, Jour. de Méd., Chir., et Pharmacie, 1786.

The œsophagus was in a state of gangrene from the commencement of the trachea downwards, for four fingers' breadth; below this the canal was considerably narrowed from chronic inflammation. The thyroid gland was quite destroyed; and communications existed between the pharynx and larynx.

CASE II. CHRONIC INFLAMMATION: ULCER. A female* had for the last ten years of life suffered from difficulty in swallowing, and very frequently during the last two years food was very apt to lodge, and could only be got rid of by retching. In September 1744 she was unable to swallow solids, and soon afterwards had the same difficulty with liquids. The throat seemed paler than usual: she had constant dryness, but no fixed pain, discharge from the mouth, or factor of breath. For six weeks before her death she was nourished entirely by broth clysters.

The upper part of the œsophagus, for three inches of its length, was converted into a tough brown viscid substance: below this point the canal was narrowed. The thyroid gland was enlarged.

CASE III. CHRONIC INFLAMMATION: ULCERATION BELOW THE STRICTURE. F., aged 36,† within twelve months before her death began to suffer from dysphagia, which gradually increased. She took mercury without benefit. When seen, ten months from the commencement of the affection, no solids would pass; fluids passed only with great difficulty and severe pain, which extended to the Eustachian tubes. An attempt was made to pass a bougie, but it was arrested opposite the cricoid cartilage, a smaller one was then tried and passed, but the irritation produced was so great, that it could not be introduced again. Great difficulty was experienced in hawking up the phlegm, and at last this became impossible. For six days before her death, nothing entered the stomach.

Behind the cricoid cartilage a contraction of the canal existed, nearly obliterating it; half an inch below, two spots of ulceration existed. The thyroid and lymphatic glands were enlarged: this had taken place on the exhibition of the mercury.

CASE IV. CONGENITAL DYSPHAGIA: CHRONIC INFLAMMATION: ULCER BELOW THE STRICTURE COMMUNICATING WITH THE LUNGS. A lady, aged 59,‡ had been subject since infancy to a remarkable difficulty in swallowing. For the last thirteen years it had been very troublesome; and if the food was not well masticated before being swallowed, it became arrested and spasm was produced. Eight months before death, she was seized with pain a little above the pit of the stomach and a sense of chilliness in the back: these sensations left her, but returned at the end of a month, and continued. The food, when swallowed, passed down to the seat of the pain, which seemed to exist close to the orifice of the stomach. The passage of the first morsel was attended with severe agony, but after the second it was less. In addition to the pain, she had constant heartburn, and violent retching; these symptoms increased much in severity during the last six weeks of life, and she spat up a quart of mucus a day, and when the food was arrested, it returned mixed with mucus. A short time before death, an aphthous eruption appeared on the tongue, which spread to the fauces; and at the same time great difficulty in breathing set in.

The aphthæ were found, after death, not to have spread beyond the fauces. The œsophagus was contracted, but not thickened: behind the cricoid cartilage, an inch lower down, a second contraction existed: after this it became larger throughout, but was smaller than common. The canal, for three inches below the bifurcation of the trachea, was in a state of ulceration: from it two sinuses passed into the lungs, but did not communicate with any of the bronchi. The parts surrounding the ulceration were thickened and condensed.

CASE V. CHRONIC INFLAMMATION OF THE ŒSOPHAGUS: ABSCESS: ULCERATIONS COMMUNICATING WITH THE ŒSOPHAGUS AND LEFT BRONCHUS. A man,§ who had drank freely of

spirits, had suffered once from an affection of the stomach, and several times from *delirium tremens*, became, in January 1831, subject to pain in the chest and stomach. The last was relieved by remedies, but the other continued, and was followed by difficulty in swallowing, which increased to such an extent, that solids ceased to descend, and the same difficulty at last extended to fluids. He lost much flesh and strength. In July and August he suffered severely from hunger and thirst; his skin was hot; and fluids had ceased to enter the stomach. An attempt was made to pass a small tube, but without effect. On the 1st of September, he began to suffer from cough with purulent expectoration: and on swallowing fluids, they remained some time at the point where the obstruction existed; cough then came on, and they were rejected. This state continued up to time of death on the 24th. He was nourished by clysters.

From the middle of the œsophagus, as low as the orifice of the stomach, hard gristly thickening existed; and it was so narrowed, that the smallest catheter would not pass. Opposite the lower part of the trachea, a large mass of cellular tissue existed, which was in close connexion with the parts adjacent. This was found to be the sac of an abscess. Communications existed between it and the œsophagus and the left bronchus.

CASE VI. CHRONIC INFLAMMATION: ULCERATION. M., aged 42,* received, six months previously, a kick from a horse in the epigastric region, by which severe pain was excited. He soon after had an attack of ague. Difficult and painful deglutition set in after a cold, attended with burning sensation in the upper part of the epigastrium, and tenderness on pressure. No vomiting or nausea after eating, existed, nor cough or difficulty in breathing. The appetite was good, and the bowels natural. A laxative on the 5th of June produced much relief. On the 7th, the difficulty in deglutition became much worse, and on the 11th, a dry cough set in with constriction of the throat, fœtid odour from the mouth, and heartburn. The obstruction seemed to exist at two points, near the larynx and at the orifice of the stomach. On the 15th, the cough was worse, much viscid mucus being brought up. By the 22nd, the strength was much reduced: and fœtid pus was coughed up. He sank one month from this time. The obstruction at the upper part of the canal disappeared a fortnight before death.

The œsophagus opposite the fifth dorsal vertebra was so narrowed for an inch of its length, that a pen with difficulty could be made to pass; above this the canal was enlarged, and contained purulent ichorous fluid. The whole of this tract was of a livid grey hue and adherent to the trachea: the two canals seemed to have a common orifice. The lungs were not adherent, but they were filled with spumous serum and blood. No fluid was found in the pleural cavities.

Harrington Square, London, Sept. 1853.

ON DEGENERATIONS OF THE GLANDULAR STRUCTURE OF THE STOMACH.

By C. HANDFIELD JONES, M.B. Cantab., F.R.S., Assistant Physician to St. Mary's Hospital.

It is an ungrateful task for the pathological observer to have to add to the number of morbid changes, which, there is but too much reason to fear, are irremediable. From this unwelcome knowledge, however, one advantage, at least, results: that the mind of the practitioner is saved from that painful feeling of disappointment which naturally follows when we find remedies of no avail in cases where we trusted they might have been potent for good. It is at least some satisfaction, though a poor one, to know that our best directed efforts to restore healthy action may fail, not because our measures were inappropriate to the case, but because the structure whose function we would restore had perished. Probably there is no organ in the body on whose

* Wilmer, Cases and Remarks in Surgery, 1779.

† Home, On Stricture of the Urethra and Œsophagus.

‡ Ibid.

§ Meyer, Berlin Med. Zeitung, 1856.

* Mauchart, de Strumâ & Œsophagi, in Haller's Disp. Chir. Selecta, lib. ii.