ORIGINAL COMMUNICATIONS.

CLINICAL ILLUSTRATIONS OF SOME DISEASES OF THE ŒSOPHAGUS.

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CANCER.

CANCER presents some distinctions from ulceration, in the point of the canal which it attacks. No part is exempt; but the lower half seems to present a greater tendency than the upper. Of the thirty-three cases which I have collected from various sources, the upper half of the canal, including the lower part of the pharynx, was affected in thirteen; in the remaining twenty, the lower half was the seat of the disease: in two only was the disease seated in the inferior fourth.

The fibrous and encephaloid forms of cancer seem to be of much less frequent occurrence than the cartilaginous; and Lebert (*Traité Pratique des Maladies Cancéreuses*, 444) makes the same remark on the general absence of fibrous element. He insists that it is rare to meet with general infection of the system with secondary deposits, the disease being generally confined to the œsophagus itself, or the parts adjacent. The same remark was made before by Rokitsky (*Pathol. Anatomie*), who also observes that the œsophagus is very rarely the seat of secondary disease, and then only when the posterior mediastinum has been diseased. The case of Grisolle seems to have been of this character; and Desgranges (*Journal de Corvisart*, etc., an. x) mentions the case of a man, aged 50, who had on each breast a cancerous tumour of the size of an egg. He began to suffer from dysphagia, to which cough, expectoration, and difficulty of breathing, were soon joined. Some months before death, he brought up a little glandular body of the size of a pea, followed by some very offensive fluid; and he was enabled to swallow solids. Low fever, with night sweats, soon afterwards set in; and he died suddenly, eight months from the commencement of the dysphagia. In the lower part of the œsophagus, some scirrhous tubercles existed in a state of suppuration; the glands of the œsophagus were much enlarged. The right lung was loaded with tubercles in different stages; and the pleural cavity of that side contained fluid.

Males present a greater tendency to this disease than females, almost in the same ratio as in ulceration. In the cases, twenty-three were males, and nine females.

As regards age, men after the 40th year presented a greater tendency than females.

Ages.		Males.		Females.	
From 25	to 30	0		1*	
30	" 35	1		2	
35	" 40	2		2	
40	" 45	3		2	
45	" 50	3		1	
50	" 55	5		0	
55	" 60	1		1	
60	" 65	4		0	
65	" 70	4		0	

ENCEPHALOID DISEASE OF THE CANAL.

CASE I. ENCEPHALOID TUMOUR OF LOWER PART OF THE PHARYNX.† M., aged 45, six months before death, began to suffer from pain in the œsophagus, with dysphagia, first of solids, then gradually extending to fluids. The mucous membrane of the mouth and fauces was injected, and covered with white ashy coloured exudation. An obstruction to the introduction of an instrument from a hard body was met with in the lower part of the pharynx. Hectic set in, and at last the patient sank from inanition.

The lower part of the pharynx was the seat of a tumour;

it was red and livid grey in some points, in others white and creamy; it was ulcerated in parts, from which exuded a dark yellow foetid fluid. The tumour had so obstructed the upper part of the œsophagus, that a straw would pass with difficulty.

Dr. Hodgkin (*Lectures on the Morbid Anatomy of the Mucous and Serous Membranes*, lect. xviii) mentions an instance of encephaloid tumour of the lower part of the pharynx, and the first part of the œsophagus. Difficult deglutition existed. The tumour could be felt; it pressed the larynx forward. It was detached, and brought up.

Monro (*Morbid Anatomy of the Stomach and Gullet*) says that his father met with a case of fungoid disease of the pharynx and upper part of the œsophagus. The patient died from starvation. He himself met with an instance in the pharynx.

Baillie (*Morbid Anatomy*) speaks of a case which he saw, where the pharynx and the upper part of the œsophagus were diseased. Its surface was ulcerated. The case is no doubt the one which Monro's father saw.

CASE II. ULCER OF PHARYNX SURROUNDED BY SOFT WARTY GROWTHS: PERFORATION OF TRACHEA.* F., aged 36, had good health until fifteen months before death. She then began to experience difficulty and pain in swallowing. For nine months her symptoms gradually increased; her voice then became rather hoarse, and she had cough, but no expectoration: this was always excited by attempting to swallow. At this time, she had pain on the right side of the thyroid cartilage, increased by pressure, and attended by fulness of the parts. In a few weeks, she had considerable hæmorrhage, which occurred almost daily, and always followed pressure on the thyroid cartilage. The difficulty of swallowing, and the cough excited by doing so, at last became so distressing, that, for fourteen days before death, she was nourished by beef-tea injections.

An irregular cancerous ulcer existed in the pharynx; it had laid open the trachea immediately below the cricoid cartilage, and affected the right thyroid cartilage and arytenoid muscles. The mucous membrane around the ulcer was covered with soft warty growths.

CASE III. ENCEPHALOID DISEASE OF THE LOWER PART OF THE PHARYNX, AND FIRST PART OF THE ŒSOPHAGUS.† F., aged 45, single, in January 1827, began first to experience difficulty in swallowing dry food; and, by the 1st of April, it had greatly increased. When seen, on the 22nd of August, her pulse was 96, with symptoms of hectic. A gum elastic catheter was passed down five inches from the teeth, when it met with an obstruction. On being withdrawn, a little mucus tinged with fluid blood followed, and she was able to swallow a little fluid with great difficulty. Caustic was applied, and nourishing enemata were thrown up. She lost strength, and the dysphagia increased. The caustic produced so much irritation, that it was obliged to be discontinued. She was seized with dysentery, the discharge consisting of blood and sanies, but without pain or tenesmus. She died on the 12th of September.

The whole of the pharynx, from below the arytenoid cartilage, and for half an inch of the first part of the œsophagus, was covered with a yellowish white substance, with an uneven tuberculated surface, varying in consistence from lymph to soft cartilage. It varied in thickness from a quarter to half an inch, and contained many small cavities. The muscular tissue below it was of a pale yellow hue; and a gland situated behind the diseased part of the canal contained some viscid opaque fluid. The disease had so narrowed the canal, that a crow-quill could with difficulty be made to pass. The unaffected portion of the canal was unusually vascular. The heart and lungs were healthy.

CASE IV. SIMPLE STRICTURE; DILATATION, WITH FUNGOID DISEASE AND ULCERATION OF WALLS; TWO OPENINGS INTO TRACHEA; RINGS OF TRACHEA ERODED; ŒSOPHAGEAL GLANDS ENLARGED.‡ M., aged 50, nine months before death, came under Mr. Ward's care for stricture of the

* This person's sister died of the same disease at 27, and her mother at 56. They are not included in the table.

† Dr. Romberg, in Caspar's *Wochenschrift*, 1853.

* Dr. Jeaffreson, *Transact. of the Pathol. Soc. London*, vol. ii.

† Mr. Cumin, *Edin. Med. Chir. Transact.*, vol. iii.

‡ Mr. Ward, in *Trans. of Path. Soc. of London*, vol. i.

œsophagus of twelve months' existence. For three weeks, he derived benefit from the use of bougies; but, the last time that one was used, blood was ejected and pain excited, which subsequently became constant, and led to the suspicion that cancer existed. The dysphagia gradually increased; and, ten days before death, violent dyspnoea came on, with inability to swallow, each attempt being followed by violent spasmodic cough, and the ejection of the fluid taken. His voice sank to a whisper.

In the œsophagus, immediately below the cricoid cartilage, was a narrow ring, so as just to admit the top of the little finger. Here the mucous membrane formed a valvular fold. Immediately below this was a dilation as low as the bifurcation of the trachea. The walls were thick and irregular with cancerous nodules; the mucous membrane was destroyed. Two openings existed, communicating with the trachea on its anterior walls. The fourth, fifth, sixth, seventh, and eighth rings of the trachea were eroded. The glands of the œsophagus were enlarged.

CASE V. ENCEPHALOID ULCERATION OF THE CENTRE; BRONCHIAL GLANDS ENLARGED.* F., aged 60, seen in July 1796, had been suffering six months from difficulty in swallowing. Food was arrested near the middle of the œsophagus; severe pain was excited, and it was returned. The same difficulty extended sometimes to fluids. She was much emaciated, and suffered considerably from low fever. Cough soon set in, with expectoration of purulent matter; and she sunk in the following October.

The bronchial glands were hard and swollen; the lungs contained tubercles in considerable number. The œsophagus, for three inches of its extent in the centre, was in close contact with the lung; and here the walls were fungoid and ulcerated.

CASE VI. FUNGOID DISEASE OF UPPER PART OF CANAL; ENCEPHALOID TUMOUR IN THE CHEST; TUBERCLES IN THE LUNGS.† M., aged 64, of generally good health, had been a soldier from 1797 to 1814. For some time he had brought up filamentous mucus by regurgitation, early in the morning, while fasting. He had never suffered from any difficulty in deglutition till six weeks ago, when suddenly, while at a meal, difficulty was experienced. At the same time he commenced to suffer burning pain at two points, after the passage of both solids and liquids. The voice began to lose its tone. The appetite continued good, but severe constipation set in, and the respiration became oppressed. March 8, 1847, he entered the hospital. His face was of an earthy aspect; and there was considerable emaciation. His neck was prominent on the anterior and inferior part, most on the right. Sonorous râles were heard on both sides of the chest. Deglutition of liquids was yet possible; they descended very slowly, with a gurgling noise, at the points where the burning pain existed. On March 9th, an attempt was made to pass a catheter, but without success; and the same result followed the introduction of a bougie, on the 10th, by M. Baillarger. The moment it reached the bottom of the pharynx, severe pain and cough were induced, with expectoration of filamentous mucus. In the evening, the bougie was passed with greater ease and less pain; and it was repeated several times up to the 13th: then it was not introduced until the 16th, when a larger one was passed. In the evening of this day, spontaneous pain occurred at the spot where the pain was complained of in passing the instrument. On March 17th, the instrument passed. On the morning of the 18th, chills were experienced, followed by fever, which continued until death, on the 22nd. In the last days of life, the emaciation became extreme; the voice was nearly extinguished; the tongue brown; and there was an acid taste in the mouth.

At the *post mortem* examination, the œsophagus, an inch and a half down, presented a tumour which narrowed its diameter, covered by smooth, thin, delicate mucous membrane. This tumour projected from a larger one, situated at the entrance of the chest. It seemed to be formed of

tissue, which had all the characters of encephaloid matter: under the microscope. It was in a state of suppuration. Three inches lower down, a fungous ulcer, two inches and three quarters long, and nearly two inches broad: it was surrounded by two or three small tumours, consisting of encephaloid tissue. The vocal cords were thickened; and, near the commencement of the trachea, the same tumour projected. The recurrent nerves were embedded and untraceable. Tubercles existed in a healing state in the lungs.

CASE VII. SCIRRHUS CONTRACTION OPPOSITE BIFURCATION OF TRACHEA; FUNGOID MASS BELOW.* M., aged 47, had generally good health, until after some mental trouble which affected him much, when he began to suffer from obstruction to the passage of food, which was at last rejected, mixed with mucus, but often thrown up without any difficulty. The dysphagia would suddenly return at meals; and it would be only with the greatest difficulty, and drinking copiously of water, that the morsel could be made to descend. He suffered from a constant sense of oppression in the centre of the sternum; and deglutition increased this symptom considerably. It was believed to be rheumatism, and was treated as such. The benefit which he derived from calomel and cicuta, and other antirheumatic medicines, strengthened this opinion. He died after vomiting blood for twenty-four hours.

The upper half of the canal was found dilated, and containing coagulated blood. Opposite the bifurcation of the trachea a scirrhous body existed, of the size of half-a-crown, and half an inch thick, which had materially narrowed the canal. From this point to within a short distance of the stomach, it was converted into a red fungoid mass, presenting scirrhous at parts; and here the canal had been narrowed to such an extent, that a small quill would with difficulty pass.

CASE VIII. FUNGOID TUMOUR IN THE LOWER HALF OF CANAL; LUNGS ADHERENT.† M., aged 70, entered St. George's Hospital on 22nd November, 1815. He was unable to swallow either liquids or solids, the difficulty existing opposite the cricoid cartilage. His health had been good until two months previously, when sudden and great difficulty in swallowing came on. During the next three weeks, on some days he was able to swallow fluids, and on others not; then he suddenly recovered the power of swallowing; but ten days before admission, the difficulty returned. He was quite free from pain until within the last few days, when weight and pain in the præcordia came on. He suffered more from hunger than from thirst. If he swallowed anything, it remained down for a few seconds, and was then returned. He expectorated a white, bitter, glairy phlegm. The œsophageal bougie was passed without obstruction; and, three weeks after his admission, he could swallow fluids without much difficulty; but his health continued to sink, and a short time before death, which took place on the 31st of January, an abscess formed under the armpit, and gave issue to a pint of pus.

The œsophagus, just where it entered the posterior mediastinum, was three times its natural size, and of a dark purple hue. On being opened, it was found to contain a large, soft, spongy, fungoid tumour. The lungs were both adherent; the rest of the viscera healthy.

The guard of a mail coach‡ had enjoyed good health until six months before his death, when dysphagia set in. He was placed under an alterative course of mercury; but he derived most benefit from the use of the armed bougie, which never failed to remove the obstruction in the canal. Even within the last month of life, he was enabled to swallow solids cut very small.

SCIRRHUS DEGENERATION OF THE CANAL.

CASE I. ULCER IN PHARYNX.§ M., aged 65, had, from an active, sober life, changed to a sedentary one, and at the

* Hufeland's Journal, 1798.

† Gazette des Hôpitaux, 1847. Service de M. Grisolle.

‡ Heineken, in Hufeland's Journal, Band xxxii.

§ Mr. Hammerton, cited in Sir Charles Bell's Surgical Observations.

¶ Howship, Practical Observations on Indigestion.

‡ Desgranges, Journal de Corvisart, Leroux et Boyer. An. x.

same time lived freely. An attack of vertigo was experienced; for this he was leeches. Soon afterwards, some slight uneasiness was experienced in the throat, which, in spite of treatment, went on increasing. When seen, his voice had become hoarse and low during three weeks; the submaxillary glands, particularly on the left side, were tumefied; and the motion of the lower jaw was extremely painful; and there was swelling and pain on the left side of the neck. The left tonsil was inflamed and ulcerated, and the back of the mouth participated in the disease. He had frequent cough, and a great excretion of mucus and saliva, amounting to from three to four pints a day. In swallowing, the greatest difficulty was with the first mouthful; if it passed, the remainder seemed to go well. A seton was introduced, and camphor and mercurial frictions were ordered, but to no purpose. At the end of a month, the deglutition had become more difficult; he could swallow only by depressing his head. The voice was more affected. His strength was much reduced. A sanious discharge was mixed with the mucus and saliva. Respiration was short and difficult; and death from suffocation ensued.

The maxillary glands, particularly the left, were much engorged; as was also the thyroid. The left half of the root of the palate was confounded with the pillars and the left tonsil, forming a scirrhus ulcer, which extended down the left side of the pharynx. A hardness also existed, extending from the tonsil down and back to the vertebra. The remainder of the pharynx and palate and uvula were swollen, hard, and inflamed. The epiglottis consisted of a mass of scirrhus disease, attached only by a point to the upper part of the larynx, which was also affected in the same manner; and at the base of the tongue, on the right side, an ulcerated excavation existed. The lungs were healthy; some fluid in the pleural cavities. The heart was small.

CASE II. ULCER IN UPPER PART OF CANAL; ENCEPHALOID TUBERCLES; THICKENING OF THE WALLS OF ŒSOPHAGUS AND TRACHEA.* F., aged 48, was delicate, and in the habit of spitting a large quantity of thick mucus. She became, after much mental anxiety, the subject of dysphagia, with difficulty in breathing, and sense of suffocation. At first these were slight; but, at the end of six months, they became very severe, and pain was experienced under the sternum on the left side, passing up to the shoulder and arm of the same side, and to the spine. The sensation of suffocation was very severe; under any mental emotion or exertion, it became very distressing, and also during the night; it was accompanied by cough, and expectoration of a thick white viscid matter. She gradually got worse; the right side of the neck became tumefied; her voice sank; and, in attempting to swallow, she was obliged to study her position. She at last died in an attack of suffocation.

The glands of the right side of the neck were greatly enlarged; some were of the size of pigeons' eggs, containing some dark offensive fluid. In the trachea, near its division, was a hard thickening of the size of a nut, which narrowed both the cavity of the trachea and that of the Œsophagus. In the last, from the pharynx to below the thyroid gland, an ulcer existed, surrounded by several soft white lardaceous tubercles. The stomach was small.

CASE III. TUMOUR IN UPPER PART OF CANAL; GLANDS ENLARGED; ABSCESS IN THYROID.† F., aged 35, the mother of several children, suffered from great difficulty in swallowing. The attempt to swallow a little milk produced severe pain in the ears, from the efforts necessary to make it descend. With the finger, a tumour could be felt deep in the pharynx. She was much troubled by viscid slime collecting. An attempt was made to introduce a small tube, but in vain. Leeches and blisters were applied.

May 10th (seven days after the use of these measures). She was much worse; she had pains shooting towards the ears, particularly the left. Calomel and sugar were rubbed on the side of the tongue.

May 29th. Her mouth was sore, but there was no im-

provement. A caustic issue was made near the thyroid cartilage; but, four hours afterwards, a severe attack of spasm came on, so as to threaten suffocation. Cold and an opiate gave some relief.

May 31st. There was pain in the epigastrium; and the breath was much affected.

June 7th. The voice and breathing were more natural; and she could swallow better. She had had frequent attacks of spasm.

June 23rd. She was better. She had to make many efforts before fluids could be made to pass from the pharynx into the Œsophagus.

July 12th. Bougies were passed for a week; and she was able to swallow better; yet the trachea seemed more affected. The issues were kept open.

July 16th. She was much worse; the breathing was very troublesome; the air seemed to pass through a constricted passage. She had frequent cough, which produced great faintness.

July 18th. The patient died.

A scirrhus tumour existed in the pharynx and upper part of the Œsophagus; and lower down in the canal were two small masses. The mucous membrane of the glottis and opening of the larynx was thick and dense; two small tumours existed in the larynx, which had so narrowed the canal, that only a small chink existed. The glands of the neck were swollen; and an abscess had formed in one of the lobes of the thyroid gland.

CASE IV. ULCER IN UPPER HALF OF CANAL.* M., aged 61, was seen on the 14th of May. He had indulged freely in spirits for eight years. He had been subject to cough in the winter; this had left him six weeks before he was seen, and was succeeded by difficulty in swallowing solids unless well moistened, and then only in very small quantities at a time. The difficulty had greatly increased, and was attended with constant pain in the throat, shooting up to the ears and jaws, with uneasiness in the lower part of the Œsophagus. The morsel seemed to meet with an obstruction immediately behind the cricoid cartilage; it was arrested there for a short time, and then seemed to pass; but at times it was rejected, mixed with phlegm. The voice continued good. He was somewhat emaciated. A bougie was arrested seven and a half inches from the teeth, producing much irritation, and was followed by the ejection of mucus streaked with blood. Two other attempts were made to pass it, but both failed. On the 19th of May it succeeded, and gave the sensation as if passing through a piece of paper.

May 20th. He was able to swallow better; yet the pain in the ears and præcordia were very severe.

May 28th. He was better. The bougie passed with more ease, but gave more pain, and was followed by the rejection of mucus streaked with blood. The pain in the præcordia was severe.

July 14th. A larger bougie was passed; but, on the 16th, it would not pass, and the pain in the lower part of the Œsophagus was more severe. An attempt was made on the 21st, but it failed; severe coughing and retching being excited. Recourse was then had to the caustic bougie: its use was followed by severe burning pain.

August 29th. The caustic bougie had been frequently used during the month; but the dysphagia had much increased, and the emaciation had made great progress, as also had the pain, and at times blood had been spat up. The disease gained ground; and, on the 22nd of October, puriform fluid was brought up, which increased in quantity, and was mixed with the mucus. On the 25th, all attempts to swallow produced violent convulsive efforts in the stomach and diaphragm: nothing would descend. Death took place on the 5th of November.

The Œsophagus, behind the cricoid cartilage, was nearly obliterated by thickening of its coats. It was ulcerated for the space of an inch above and below the constriction; the ulcers had raised jagged edges, and their surface was covered

* Desgranges, *Journal de Corvisart, Leroux, et Boyer*. An. ix.
† Sir Charles Bell's *Surgical Observations*.

* Mr. Jeffrey's *Cases in Surgery*.

with a soft flocculent kind of slough. The lower part of the canal was more vascular than usual.

CASE V. SCIRRHOUS DISEASE OF THE CENTRE OF THE CANAL.* M., aged 40, three months previously, began to suffer from pain and uneasiness between the shoulders; this was followed, in the course of a few weeks, by obstruction to the passage of food near the upper part of the sternum, and by great inconvenience from a copious secretion of glairyropy mucus. Of late, the pain between the shoulders was so severe as to be likened to a red hot poker boring through the spine; at times, shooting along the ribs. It was with great difficulty that a little bread and milk could be got down by pressing the throat with his finger and thumb. A bougie met with an obstruction, eight and a half inches down; great irritation followed its use; but, in a few days, his deglutition became much easier. He soon, however, relapsed, and even milk was with difficulty made to descend. He died.

No *post mortem* examination could be obtained.

CASE VI. SCIRRHOUS DISEASE OF THE LOWER PART OF THE (ESOPHAGUS.† M., aged 60, had suffered from difficulty in swallowing for six months. Any attempt to swallow a little water excited a kind of regurgitating effort in the lower part of the pharynx, with cough, a little only seeming to pass: before reaching the stomach, it again met with an obstruction, where it was detained for a few minutes, and then rejected. The obstruction at the lower extremity had been only observed during the last few days.

After death, the lower part of the œsophagus was found scirrroid. There was no thickening in the upper part of the canal, but, two inches down, indications of inflammation existed, extending to within four inches of the cardiac orifice of the stomach.

SCIRRHOUS DEGENERATION AFFECTING THE TRACHEA, VERTEBRA, AORTA, AND PLEURAL CAVITIES.

CASE I. SCIRRHOUS DISEASE OF THE (ESOPHAGUS, OPPOSITE THE FOURTH DORSAL VERTEBRA; TWO OPENINGS COMMUNICATING WITH THE TRACHEA.‡ M., aged 70, tall and large made, had not enjoyed good health for the last ten years, and for some months past had lost flesh. Three months ago, he experienced, while at dinner, difficulty in swallowing, which had since increased to such an extent, that soft or liquid food only would pass.

When seen on July 10th, 1838, he had no pain, but at times a burning sensation near the centre of the sternum. A probang, a quarter of an inch in diameter, was passed. On the 22nd, he was quite unable to swallow for thirty-six hours; at last, a small tube was passed, and through this food was introduced. In the evening, the power of swallowing returned. A probang was repeatedly passed. On October 17th, it was observed to be covered with slimy fetid matter, and for several days fever existed, which then declined, and he was enabled to swallow better than he had done for a considerable length of time. In the last week of December, cough came on, accompanied with dyspnoea; food increased the cough much: and severe burning behind the sternum was at the same time excited. The skin was hot and dry; the pulse 108; the tongue coated and dry; and the emaciation great. Even liquids were sometimes rejected. The debility became, on the 9th of January, so great, that he was obliged to keep his bed. Fluids were returned by the cough. The pulse was 110, small; thirst was severe; the bowels acted twice daily. The pulse increased up to the evening of death, the 12th, when it was 120.

The œsophagus was dilated in its upper part; but opposite the fourth dorsal vertebra, to which it adhered closely, its walls were thickened, and its calibre diminished to one-eighth of an inch by a rough tuberculated substance, for two inches in length, covered by sanious matter. Openings existed, communicating with the trachea.

CASE II. SCIRRHOUS DISEASE BELOW THE CENTRE, THREE OR FOUR INCHES IN EXTENT, AFFECTING THE SPINE: COM-

MUNICATION WITH THE TRACHEA.* M., aged 56, had been in the habit of drinking freely of spirits. A week before Christmas 1844, he began to experience some difficulty in swallowing, particularly solids. This state continued a month, when, after drinking a large quantity of rum, the difficulty increased, and was accompanied with pain in the epigastrium. He then applied to the hospital, and at the end of a week, by the use of bougies, he was much relieved. A relapse soon took place, and for two months he sought no treatment. When seen, the emaciation was extreme; and he suffered from a constant sense of burning constriction in the œsophagus, with cough and expectoration of thick mucus, tinged with blood; the thirst was intense; he had headache; and his bowels were severely confined. The pulse was 90; the skin cool; and urine scanty. Swallowing excited severe pain in the centre of the sternum, and, in a few seconds, the morsel was returned by an inverted action; and the little which reached the stomach was often rejected by vomiting, mixed with highly offensive fluid. An elastic tube was arrested near the centre of the sternum. During the last few weeks of life, he was sustained by nutritive enemata. He at last sank from inanition.

The œsophagus, near its centre, adhered firmly to the spine. For three or four inches of its length, down near where it passed through the diaphragm, it was in a state of scirrroid ulceration. An opening existed, communicating with the trachea. The bronchial tubes were filled with frothy mucus, and the bronchial glands were enlarged and mottled. The bodies of the vertebræ and the intervertebral substance, where the disease was in contact, had begun to be involved.

Aussant (*Diss. sur les Squirrhès de l'Estomac*, cited by Dr. Walshe) mentions a case where death occurred from the spinal cord becoming implicated; the intervening vertebræ were much softened. I have not been able to obtain this work, but a copy of it exists in the library of the Ecole de Médecine.

CASE III. SCIRRHOUS DISEASE OF THE (ESOPHAGUS, OPPOSITE THE BIFURCATION OF THE TRACHEA: ABSCESS BETWEEN THE TWO CANALS, COMMUNICATING WITH BOTH: THE LEFT RECURRENT NERVE IN PART DESTROYED.† M., aged 41, a bricklayer, of intemperate habits, had suffered from difficult deglutition during two years. Nine months ago, his voice became altered in sound. Food met with an obstruction in the upper part of the sternum, large quantities of fluid being necessary to assist its descent. Regurgitation often took place, with violent retching and coughing. On the 18th of January, he entered the London Hospital. On the 19th, a small probang was introduced; it met with an obstruction at the lower part of the pharynx; and lower down, a second obstruction was met with, after surmounting which the instrument entered the stomach. Pain was excited, which lasted some hours. He could now swallow food cut up very fine, with thin fluids. The probang was passed several times, but each time the difficulty in doing so was increased. In February, the difficulty in deglutition had increased much; milk and thin puddings were got down with great difficulty, and in very small quantities. The voice was reduced to a loud whisper. His health soon began to suffer; his face became of a bluish tint; the breath was highly offensive; and, by the 14th, nothing but liquids would pass. Soon after this, if fluids were taken, they seemed to remain some seconds, and were then rejected by coughing. Thick mucus collected in the throat, and for three days nothing would pass. A small tube was passed down to the lower stricture, and nutritious fluids injected three times daily. On January 22nd, the skin became hot and dry; the pulse 118; the cough was very troublesome; and the lower stricture was more contracted. On January 23rd, he was much worse; pulse 136. A fit of coughing came on while talking; a quantity of dark fetid matter was brought up; and he fell back and expired.

The thyroid gland was condensed, and consisted of a

* Howship, *Practical Observations on Indigestion*.

† *Ibid.*

‡ Dr. Wyman, *American Journal of Medical Science*, 1839.

* Mr. Harris, *Edin. Med. and Surgical Journal*, vol. lvi.

† Mr. Barratt, in *Lancet*, 1847.

number of nodulations, passing back on the left side, separating the œsophagus from the trachea, and involving the carotid vessels. On section, a dark creamy substance exuded from some, while others gave issue to foetid matter. Between the œsophagus and the trachea, an abscess existed, containing foetid matter, and communicated with both the canals. The œsophagus, opposite the bifurcation of the trachea, was so narrowed as scarcely to admit a goose-quill. The constriction was formed of tissue, which under the microscope showed cancer-cells. The carotid vessels and jugular veins were implicated. The recurrent nerve of the left side ended in a nodule, in the wall of the abscess.

CASE IV. SCIRRHOUS ULCER: OPENING INTO TRACHEA AND AORTA.* M., aged 42, began, in the course of the summer of 1840, to suffer from difficulty in swallowing. He entered the Hospital of Zurich in June 1841. The deglutition of solids had been nearly impossible for some weeks, food being arrested opposite the ensiform cartilage. Liquids would pass only, and in small quantities. At the point where the obstruction existed, severe burning pain was experienced. A probang was passed, but it would not enter the stomach; and severe pain was excited. An attempt was again made, and on the next day he vomited up three pints of frothy blood, and died in an hour.

A carcinomatous ulcer existed opposite the bifurcation of the trachea, of the size of a five-shilling piece; it communicated with the last by an opening of considerable size, and with the aorta by another.

CASE V. ULCER OF LOWER PART OF THE CANAL: PERFORATION OF THE RIGHT PLEURAL CAVITY.† M., aged 60, was of good health, but much affected from losses and anxiety. His digestion first suffered; but, in April 1841, dysphagia first set in, the point of obstruction being near the epigastric region; and by June it had made so much progress, that great difficulty was experienced even to the passage of fluids. A bougie was attempted to be passed, but without success. Several other efforts were made with smaller ones, and at last the obstacle was surmounted; and, by means of a narrow elastic tube, nourishment was for a month conveyed to the stomach. One morning, more resistance than usual was met with, and a large quantity of putrid sanious matter, with a portion of disorganised fleshy substance, which crepitated when cut, was ejected. From this time, the deglutition became easier; and, in a few days, he was able to swallow an egg and soup without difficulty. On August 15th, when swallowing some soup, he was taken with severe cough, attended with purulent expectoration. Any attempt to swallow fluids was followed by great danger of suffocation. Thirst was intense. A tube was introduced, for the purpose of passing fluid into the stomach; but, from the cough and suffocation which it produced, it had evidently entered the chest. A few days after, another attempt was made, and half a glass of drink injected. He immediately fell back: it had all passed into the chest, and it was only with the greatest difficulty that it was got rid of. Enemata alone were used. He died twenty days after, and six months from the first appearance of the disease.

The œsophagus was destroyed for two inches. About an inch and a half above the diaphragm, the ulcer had ragged edges, and was of a livid colour. A perforation existed at this point, which had penetrated the posterior wall of the mediastinum into the right side of the chest.

CASE VI. SCIRRHOUS CONTRACTION; ULCER OF THE LOWER PART OF THE CANAL; PERFORATION OF THE RIGHT PLEURAL CAVITY.‡ A female entered the hospital for surgery, three weeks before death, with all the appearances of cancer, suffering from an almost complete obstruction to the passage of food. She suffered from constant acute pain in the situation of the ninth dorsal vertebra, and here the obstruction existed to the passage of food, which was, the moment it reached this point, rejected, with violent, painful,

spasmodic retching. She had constant fever; the respiration was natural. The disease had commenced two years previously: at first it was slight, then had gone on gradually increasing. Opium in large doses alone gave her relief. A bougie was introduced, and a firm obstruction was felt; severe pain followed its use, and recurred whenever the instrument was used. She refused to allow enemata to be administered, and at last sank. The œsophagus opposite the tenth dorsal vertebra was converted into a scirrhus cartilaginous substance; two inches below this point a ragged ulcer existed; at one point all the coats were destroyed, and the wall of the posterior mediastinum was opened into the right pleural cavity. The lung had a small ulcerated point, which had not penetrated the parenchyma, surrounded by lymph. No fluid existed in the cavity. The stomach was much contracted.

SCIRRHOUS DEGENERATION WITH DISEASE OF THE LUNGS.

CASE I. ULCER IN UPPER PART OF THE CANAL; TUBERCLES OF THE LUNGS.* M., aged 68, had good health up to April 1842, eight months before death, when he began to suffer from difficulty in swallowing, which at last increased to such an extent, that first solids, and then liquids, refused to pass. His aspect altered much, and became of a pale straw hue; he emaciated rapidly, and at last died from inanition. A. Berard attempted in vain to pass a tube, for the purpose of introducing food into the stomach. In the œsophagus, a short distance below the hyoid bone, the canal was narrowed so as scarcely to admit a small catheter, by a scirrhus contraction, which enveloped the whole circumference of the canal, and was nearly an inch and a half in length. Its surface was unequal, in some places of a dark grey, and in others of a dirty yellow colour; in its upper part several excavations existed. In the small intestines, near the cæcum, a thickening of all the membranes existed, for about an inch and one-sixth in length; the part was hard, and crepitant when cut, but under the microscope gave no indications of cancerous structure. Some tubercular granulations were also observed in the submucous cellular tissue. The lungs contained tubercles in the crude state. The surface of the cancerous mass, under the microscope, consisted of a mixture of mucous, epithelium, blood-globules, and cancer-cells. The tissue itself consisted of fusiform cells, with but little of the fibrous element.

CASE II. ULCERATION IN LOWER HALF OF CANAL; NARROWING BELOW COMMUNICATION WITH RIGHT LUNG.† M., aged 63, of bilious sanguine temperament, began to suffer, when 40 years old, from disordered digestion from no known cause. Pain was experienced in the epigastrium after eating, with acid eructations; and the food was often returned to the mouth some time after being taken. The mouth was often filled with saliva, like that which occurs before vomiting. Vomiting at last came on; and he was scarcely able to take anything which was not rejected. At the age of 44, he became unable to work, from severe pain in the epigastrium, which extended to the sides and shoulders; and in this state he continued for four years, the vomiting being very severe. He then became better for some months, and was at last able to return to work, but only for fifteen days, when the symptoms returned with redoubled violence, and he was soon reduced to a state of extreme emaciation. Various measures were had recourse to, but in vain. By strict confinement to a milk diet for two years he found himself much better, and he gained strength and the vomiting left him. At the age of 53, in carrying something heavy, he heard something crack in his chest, which was followed by severe pain shooting up to the shoulder. Six months after this, he entered La Charité, considerably emaciated: his face was not altered: the appetite was good, but deglutition of solids was very difficult. The first morsel descended with ease to the middle of the chest, where it became arrested; but the second was arrested at the lower part of the neck. Violent cough came on, and they were returned.

* Peuffer, in *Zeitschrift für Ration. Med.*, Band iii.

† Case of Mons. Carrier, cited by Vigla, *Arch. Gen. de Méd.*, 1846.

‡ Mr. Wardrop, in *Lancet*, 1827.

* Lebert, *Physiol. et Pathologie*, tom. ii.

† Martin, *Bibliothèque Médicale*, tom. xxiv.

Drinks, even when swallowed slowly and in small quantities, produced cough, and were rejected in the form of froth; and during the cough he was in great danger of suffocation. There was no fever; but in the evening he had chills. In a few days, however, fever manifested itself, and he gradually sank. The œsophagus opposite the sixth dorsal vertebra was in a state of cancerous ulceration: a short distance below this point it was impossible to pass a pin. The right lung adhered closely to the ulcerated part of the canal; and here an opening existed, which communicated with a cavity holding six ounces of fluid, grey and fetid; its walls were grey and formed of the substance of the lung. The bronchi and trachea contained the same kind of fluid as in the abscess. The stomach was much contracted, and the mucous membrane was of a very deep colour.

CASE III. SCIRRUS OF THE WALLS OF THE ŒSOPHAGUS; ABSCESS IN THE RIGHT LUNG.* F., aged 44, when seen, 15th Nov., 1832, had been ill six months. Food was returned unaltered, mixed with mucus; and at times, but very rarely, a fluid like coffee grounds was brought up. She had intense thirst; respiration was free, and the pulse regular; the bowels were very costive. She died on 14th Jan. 1833.

The œsophagus was narrowed from cancerous thickening. Immediately above, an opening existed which communicated with a cavity in the substance of the right lung, which contained an ounce and a half of brown fluid. The walls were irregular with a gangrenous appearance, and the substance of the lung for two inches in extent around it was hard and dense. The œsophagus adhered closely to the right lung.

CASE IV. SCIRRHOUS NARROWING, WITH ULCERATION OF LOWER HALF OF CANAL; CAVITY IN RIGHT LUNG; STOMACH INFLAMED.† M., aged 46, a retired captain of the navy, after experiencing much mental anxiety in 1831, began to suffer from dull pain in the course of the œsophagus, and difficulty in swallowing solids. At first, great part of the canal seemed affected; but later, the disease appeared confined to several points, so that the food was arrested two or three times in its descent, and at the end of a month it seemed to confine itself to the lower part. Here the morsel was arrested, and he was in great danger of being suffocated, to avoid which he drank large quantities of water. At last he was obliged to confine himself to broths. The pain was situated behind the sternum, and was much increased by talking, or coughing, or any mental emotion. Leeches were applied, first to the seat of pain, then to the anus, and strict rest enjoined; but this he neglected, got about much, and spoke frequently in public. He became much worse, the pain radiated towards the vertebral column, and extended to the right side of the chest. This last had a neuralgic character, and followed the course of the intercostal nerves, sometimes passing up along the spine. Under the idea that it might depend on some syphilitic affection, he had recourse to some nostrum. Its use was followed by the discharge of glairy mucus, often insipid, but at times acid. The quantity regurgitated became at last considerable, and the difficulty to the descent of food was so great that only a tea-spoonful of fluid at a time, and latterly often not even this, would pass. The pain at this time became lancinating, and the mucus was at times streaked with blood. Fever also lighted up, but its accessions were irregular. The efforts to get rid of the mucus at last became so painful, that the pharynx was constantly convulsed: it was of a deep red colour, and the tongue became of the same hue. A constant sensation existed in the stomach as if a ball was there, which threatened to suffocate him. Every attempt to swallow excited convulsive motions in the throat and œsophagus, which were propagated to the muscles of the abdomen, and caused them to act as in vomiting. On the 8th of September he began to expectorate phlegm; and auscultation discovered, in the posterior part of the right side of the chest, indications of pneumonia. The face was swollen, and the skin hot; and diarrhœa set in. Respiration

became more and more difficult, particularly when he was drinking. On the 10th, the expectoration was highly fetid, grey, and thin. He died on the 11th, retaining his mental faculties to the last.

The right lung was soft, the slightest pressure reducing it to a greenish, black, fetid fluid: this change was most perceptible near the insertion of the bronchial tubes and vessels. A large cavity existed in this lung, which communicated with the œsophagus, with which it adhered most intimately. The œsophagus, in its lower half, was greatly narrowed, and presented a great number of ulcerations, surrounded by pale friable vegetations. Most of these ulcerations were the commencement of small sinuses, nearly all of which ended in a pouch in the posterior wall, formed at the expense of the muscular tissue. This cavity communicated with the one in the lung. The whole of the diseased portion of the œsophagus was softened; and on its being pressed or cut, cerebriform matter exuded. The nerves of the canal showed no change. The stomach presented some red patches; and the duodenum was also injected for a short distance in its upper part. The capsule of the spleen was in some parts cartilaginous, in others ossified.

Chassaignac, in his report on this case, mentions an instance of a similar nature, which fell under his notice at the Hôtel Dieu de Nantes. The œsophagus and the right lung were affected in the same manner.

CASE V. SCIRRUS OF LOWER PART OF CANAL; ABSCESS IN LEFT LUNG; MIDDLE MEMBRANE OF STOMACH WHITE AND CARTILAGINOUS.* M., aged 50, a surgeon, had indulged freely in drink. In September 1751, he began to experience a pain just above the orifice of the stomach, on taking either solids or fluids; the pain was propagated up the canal, and at last the affection increased to such an extent, that food was rejected. When seen in January 1752, he attempted to swallow some milk, which was returned; and the same occurred with a little water; the rejected matters were mixed with viscid mucus, and the same kind of mucus was brought up in the morning. The pain was referred to a point a little above the ensiform cartilage. On swallowing, it was likened to a sense of constriction, but most frequently that of a worm like motion. He had a great desire for cold drinks. At times, the difficulty in swallowing became so great, that he was obliged to abstain for two or three days: he would then suddenly experience a sensation as if the passage to the stomach was free, and some thin pulpy food would pass; but the obstruction would soon return, and all he took would be rejected. He grew worse; the pain became more severe, hectic set in, and the introduction of drinks into the stomach became impossible. Death ensued on the 18th April.

In the left lung, close to the œsophagus, was a large cavity, containing yellow pus. A scirrhus tumour, of the size of two fingers, existed near the orifice of the stomach; the canal was narrowed for a short distance, but above this it was much dilated. The stomach was empty, and its middle membrane was white and cartilaginous. He had coughed slightly during the last few days of life, but he had complained much of a suffocative sensation.

CASE VI. SCIRRHOID TUMOUR OF LOWER PART OF CANAL; RIGHT LUNG DISEASED; COLLECTION OF SEROPURULENT FLUID.† M., aged 40, had been delicate in childhood; but as he approached manhood had gained flesh and strength. He began to suffer from dysphagia, accompanied by a dull pain at the top of the epigastrium. Six years passed, and dysphagia gradually established itself: he died after a year's extreme suffering. Five or six weeks before death, cough set in: he died from suffocation in a fit of coughing.

The lower extremity of the œsophagus, and the cardiac orifice of the stomach, were both hard and thick, and formed a scirrhus tumour an inch and a half long, like a ring pierced by an opening three or four lines in diameter. The mucous membrane was destroyed. The stomach was healthy.

* Tarleton, *Prov. Med. and Surg. Journal*, 1843.

† Grisolle, *Revue Médicale*, 1833.

* Haller, *Epist. ab Eruditiss. Viris*, Epist. 603 et 611, lib. III. Vigla, *Arch. Gén. de Méd.*, 1846.

† Desgranges, *Journ. de Méd. Chir. et Pharmac.* An. ix.

The right lung was adherent; its substance was soft, and corroded in great part: its base was ulcerated, and even putrified: posterior to it was a seropurulent collection, two quarts in amount existed.

CASE VII. SCIRRHUS DISEASE THREE INCHES IN LENGTH, BELOW THE CENTRE OF THE ŒSOPHAGUS; THE VERTEBRÆ ENLARGED; MUCOUS MEMBRANE OF STOMACH INFLAMED; PLEURITIS; FLUID IN RIGHT PLEURAL CAVITY.* M., aged 64, had good health until five months back, when from exposure to cold, he began to suffer from cough, but without expectoration. At the end of a month, pain was experienced in the ensiform cartilage, coming on after eating, and attended with difficulty in swallowing. Both these symptoms had become much worse at the end of five weeks. When seen, on September 23rd, emaciation and debility had been severe for the previous two months, and he had not been able to take either solids or fluids; the last passed down without difficulty, but, after two minutes, they were gulped up without difficulty. He had severe cough, with copious expectoration of mucus. The bowels were very confined; the appetite good; the pulse 54; the skin cool and dry; the tongue clean and moist: he slept well.

Sept. 26th. He was able to keep down a little broth. His urine was high coloured.

Sept. 27th. The cough was troublesome, with abundant expectoration.

Sept. 29th. He was able to keep down a little milk. He suffered much from pain in the epigastrium, accompanied with tenderness. Pulse 70. His cough was severe; there was no rale in any part of the chest.

Sept. 30th. He had severe pain since the previous day under the false ribs, after injecting some tea and whey. In the night, the opening of the Œsophagus became free, and he swallowed and retained a large bowlful of milk and stirabout.

For the next twenty-four days, there was little change in his symptoms: one day he retained the food taken, at others not. He was seized in the night with severe pain under the right false ribs, and much tenderness existed at this point: he could not draw a full breath. The cough was severe; the thirst great; pulse 56. The next night, the pain was so severe as to excite a kind of convulsion. He died three days after the pain in the false ribs set in. During this time, he took nothing.

The Œsophagus, two inches above the cardia, was for three inches of its length in a state of scirrhus, in some parts an inch and a half thick, and would only admit of the introduction of a goose-quill. The mucous membrane, above this point, was thickened and soft; below, it was inflamed. The mucous membrane of the stomach was very soft, and its coats were transparent. The spleen was soft. The vertebra and the inter-vertebral substance opposite the diseased part of the canal were enlarged, but not diseased. In the right pleura a pint of fluid existed, which contained shreds of recent lymph, the lower part of the inferior lobe of the lung covered with lymph.

The vomiting after the fluid had entered the stomach, must have been caused by the inflamed state of that organ.

SCIRRHUS DEGENERATION, WITH AFFECTION OF THE LUNGS, ETC.; CANCER, PRIMARY OR SECONDARY, IN OTHER ORGANS.

CASE I. ULCER OF LOWER PART; PERFORATION; CAVITY IN RIGHT LUNG; CANCER OF STOMACH; ENLARGED ŒSOPHAGEAL GLANDS.† F., aged 38, the mother of six children, complained of severe pain in the stomach, which was much increased by food. In the month of June of the same year, a difficulty in swallowing solid food was experienced, and it was often rejected mixed with a large quantity of mucus. By the use of resolvents, she became so much better, that she believed herself cured; but it returned, and made very rapid progress. In this state she was seen by Van Doeveren. All food was immediately rejected by regurgitation, mixed with mucus, and accompanied by severe pain. She seemed to derive some benefit, and gained strength, from

milk diet, cicutæ, sulphuret of antimony, and calomel, carried to salivation. But in March of the next year she became worse, and the symptoms made rapid progress. The stomach was much distended with wind, and she had painful acid eructations, as well as fever, with small pulse, and extreme debility. She also experienced in the Œsophagus an obstruction to the passage of food, as if from a collection of mucus. Milk or any other fluid was immediately rejected, and with it a grey substance like corrupted milk, with an acrid odour; and the same odour existed in the mucus. Solids were arrested at this point, exciting the most excruciating pain and anxiety, with faintings. She refused to allow nourishing enemata to be injected, and sank on the 14th of April, 1777, rejecting to the last matter like corrupted milk.

Between the right carotid artery and the trachea was an enlarged gland, nearly cartilaginous in structure, and of the size of a pigeon's egg. The Œsophagus, opposite the ninth dorsal vertebra, was hard and thickened. The right lung adhered to the pleura; and, on attempting to separate it, a cavity was ruptured, from which ran out ashy coloured grumous matter, like putrid milk. A free communication existed between this cavity and the Œsophagus, the borders of which were unequal and gangrenous. Below this point, the canal for two inches was so narrow, that a pen with difficulty would pass. The walls of the stomach were thin; and on the lesser curvature a rather large scirrhus tumour existed, midway between the cardia and pylorus.

CASE II. SCIRRHUS THICKENING OF THE LOWER PART OF CANAL; ALTERATIONS OF THE WALLS; SCIRRHOSIS OF STOMACH AND DUODENUM, PANCREAS, GLISSON'S CAPSULE, AND DUCTUS COMMUNIS CHOLEDOCHUS.* F., aged 26, married, of delicate health, while at dinner was suddenly taken with severe pain in the epigastrium; this confined her to her room for some days, and then left her, but returned at different times. She was seen by Mr. Gaitskell, three months before her death, then suffering from constant aching pain behind the lower part of the sternum, descending to the epigastrium and back to the spine, accompanied by nausea and retching. The pain varied in intensity, but was always better when the stomach was distended with food, the entrance of which was always attended with great difficulty. A bougie was introduced, and a hardness was felt. On its withdrawal, pain was experienced. It was not again passed for a month; then, for the first week, relief was experienced, but afterwards it aggravated the symptoms. Mr. Cline advised the swallowing of a weak solution of sulphate of zinc; but, at the end of three weeks, she became unable to swallow without severe pain and retching. She refused all food; and, after languishing for a fortnight, died, suffering from unquenchable thirst. Both her mother and her sister had died of the same disease—the first at fifty-six; the other at twenty-seven.

The Œsophagus, from the pharynx down to within one inch of the cardia, was white and firm, like ligament. At this point it was scirrhus; and this state extended along the lesser curve of the stomach to below the pylorus. The head of the pancreas, Glisson's capsule, and the ductus communis choledochus participated.

CASE III. SCIRRHUS DISEASE OF ŒSOPHAGUS TWO INCHES FROM DIAPHRAGM; SCIRRHUS OF POSTERIOR PART OF STOMACH, ADHERING TO DIAPHRAGM; ABSCESS IN LOWER LOBE OF LEFT LUNG, COMMUNICATING WITH STOMACH.† M., aged 34, had suffered at times for a year from pain under the ensiform cartilage; some irregularity in diet destroyed his appetite and digestion, and he lost flesh. When seen in November, he was much reduced, with great difficulty in swallowing solids, which, near the orifice of the stomach, produced much pain. Sometimes they passed without difficulty, but were soon thrown up mixed with phlegm. Liquids descended, if swallowed slowly, without difficulty. He had a sense of constriction across the epigastrium, but no tumour or tenderness on pressure; the pulse was good; the bowels were

* Dr. Graves, in Dublin Med. Journal, 1839.

† Bienland de Sana et Morb. Œsophagi. Obs. 1.

* Mr. Gaitskell, London Medical Repository, 1812.

† Dr. Taylor, Edin. Medical Essays, vol. ii.

constipated. In December, he suffered from symptoms of stone in the kidney for five days. In March, night sweats came on, and he brought up two polypus-like substances, followed by a sharp pain in the breast, which continued for four days. At the end of fourteen days, another polypous substance was brought up; but no pain followed, and the night sweats subsided. In May, he had a slight return of the affection of the kidneys; and, at the same time, he became sensible of a hardness in the left hypochondrium. Soon after this, diarrhoea set in; the stools were whitish; he lost flesh and strength rapidly; and died in the middle of June.

The omentum was everywhere scirrhus, and contained many little abscesses. The liver, spleen, and stomach, were covered with small white tumours. The stomach adhered to the diaphragm by its posterior part, by a scirrhus mass. The intestines seemed a little inflamed, and adhered to each other. The kidney contained a stone. Some fluid was found in the left pleura. The lower lobe of the left lung adhered to the diaphragm; it contained an abscess, containing pus, with some viscid brown fluid. An opening passed from this abscess through the diaphragm into the stomach. The œsophagus, two inches above the diaphragm, was in a state of degeneration like cartilage. The glands at the divisions of the trachea contained calcareous spongy matter, enclosed in a thick membrane.

CASE IV. SCIRRHOUS DISEASE OF ŒSOPHAGUS, THREE INCHES FROM CARDIA: TUBERCLES IN THE LUNGS: LIVER AND PANCREAS CANCEROUS.* M., aged 51, two years before, had had an attack of spasm in the stomach, followed by jaundice, which soon yielded to treatment. In February 1847, his health began to fail, appetite became bad, and he suffered from dyspepsia. At the same time, he experienced severe pain in the centre of the last bone of the sternum, with difficulty in swallowing. When seen on April 5th, there was no pain; the face was sallow and leaden; the tongue clean; pulse weak; dry cough; and much emaciation and constipation. Purgatives and quinine were given. On February 14th, he suffered much from heartburn, pyrosis, and sickness. The difficulty in swallowing was much increased: fluids only could be swallowed. He continued his work, that of a turner, up to the latter part of the month. He died on the 5th of May.

In the apex of the right lung, soft tubercles existed; in the left, the same, with also two small cavities. The œsophagus, three inches from its lower part, was nearly obliterated from cancerous degeneration of its walls. Above this point, the canal was much dilated. The liver contained two tumours, of a cancerous character; and, in the head of the pancreas, two tumours also existed.

CASE V. SCIRRHOUS DEGENERATION OF A GREAT PART OF THE ŒSOPHAGUS: CAVITIES IN THE RIGHT LUNG: CANCER OF THE STOMACH, LIVER, AND PANCREAS.† M., aged 55, had suffered from one and a half to two years, from disorder of the stomach, with difficult digestion. He had got much worse during the last four months; and to which had been added, for some weeks past, pain both in the stomach and in the œsophagus, accompanied with difficulty in swallowing. When seen on the eighth of August, his face was of an earthy hue: emaciation was not extreme. There was deep seated pain in the stomach, not increased by pressure; and also in the œsophagus, particularly in swallowing; the morsel being often arrested and rejected, mixed with acrid mucus. The dysphagia became so severe, that he was restricted wholly to milk. No thirst. Bowels natural. The voice soon became changed in tone, and cough also came on; and there were some harsh sounds in one of the lobes of the lung. Pulse 90, feeble. Under the use of iodine, externally and internally, he improved for a fortnight; but then, from no appreciable cause, the breathing became difficult, and the pain and difficulty in swallowing as before. The quantity of mucus brought up greatly increased, and continued to do so until

death, and was at last mixed with purulent fluid. The difficulty in swallowing increased to such an extent, that even fluids would not pass without great difficulty and severe pain. The pain in the stomach and œsophagus increased in severity. The cough was severe, accompanied with purulent expectoration. The pain in the chest was severe, and mucous râles were heard. The fluid brought up soon had a highly foetid odour, and he at last sank on the 3rd of October.

Fluid existed in the pleural cavities, and the pericardium contained three ounces of reddish serum. In the right lung, a large cavity existed, containing highly foetid yellow ichorous matter, and portions of broken down lung. A smaller one, the size of a walnut, existed near the trachea; and in the apex, was a mass of tubercles, of the size of a hazel nut. The œsophagus was as thick as the arm, from fibrous scirrhus degeneration, nearly throughout. In some parts, the walls were four or five lines thick, and irregular. Nearly the whole of the canal was ulcerated, and covered with slimy and ichorous fluid. The muscular coat was affected here and there. Deep excavations existed, and the adjoining tissues were affected. The stomach was empty, and rather shrunken. On the left side of the cardia, a scirrhus mass, of the size of a hen's egg, existed, in close connexion with some degenerated lymphatic glands; and, under its serous coat, small cancerous masses were found, varying in size from a linseed to a bean. They appeared to consist of degenerated lymphatic glands. The liver was large, and contained a great number of whitish yellow cancerous masses, varying in size from a linseed to a pigeon's egg. The head of the pancreas had begun to participate in the mischief.

CASE VI. ULCER IN UPPER PART: ANEURISM OF AORTA: BLOOD IN LEFT PLEURAL CAVITY: TUBERCLES IN LUNGS: CANCEROUS ENLARGEMENT OF GLANDS: CANCER OF LIVER AND PERITONEUM: NARROWING OF PYLORUS.‡ M., aged 54, a bookseller, was seen on November 28th, 1849. Six years previously, he had had an attack of hæmoptysis. The appetite then began to fail; sickness was felt after eating; and he had occasionally vomiting, which had increased in frequency. He had also had pain in the throat, and a sense of great constriction at the upper border of the sternum. He vomited blood, mixed with dark brown masses; not after eating, but generally in the morning, between three and five o'clock, and occasionally in the day time; and it was then preceded by a fit of coughing. Of late, he had lost flesh very rapidly. He vomited after meals, whether liquid or solid; and he also vomited florid blood, with dark clots and dark grumous masses. No cancer-cells could be distinguished. On November 23rd, he vomited half a gallon of florid blood, and on the next day even more. Great tenderness existed in the region of the stomach. A hard lobulated tumour was felt in the right hypochondriac region, measuring four inches transversely, and two inches from above downwards. He had had cough four months. There was dulness in the posterior and inferior part of the left lung. The pulse was 90, rather strong. The heart's impulse was rather increased, otherwise normal: he had palpitation occasionally. The urine deposited lithate of ammonia on cooling. Leeches were applied over the stomach. He vomited less, but the emaciation increased; and at times he vomited large quantities of florid blood. He died on December 15th.

The left pleura contained a pint and a half of blood, which had come through a laceration in the pleura, from an aneurism of the descending portion of the aorta encroaching on the left lung. The pericardium contained six ounces of serum, and the heart was contracted. Between the aorta and the œsophagus, two glands existed, greatly enlarged from cancerous infiltration, immediately projecting into a cancerous ulceration existing in the middle of the last named canal. The lungs contained tubercles. The liver contained a number of cancerous no-

* Mr. Elkington, in *Prov. Med. and Surgical Journal*, 1847.
† Dr. Rittentrop, in *Berlin Medicin. Zeitung*, 1846.

‡ Dr. Bennett, in *Edin. Monthly Journal*, 1850.

dules, as also did the peritoneum of the diaphragm and the pelvis. The pylorus was contracted; and this, with the tumour felt during life, which consisted of a mass of cancerous glands, gave rise to the vomiting.

Harrington Square, London, October, 1853.

CHANCRE IN THE URETHRA MISTAKEN FOR GONORRHOEA.

ERRORS IN THE DIAGNOSIS OF A CHANCRE OF THE THUMB, PRODUCED BY ACCIDENTAL INOCULATION, AND FOLLOWED BY SECONDARY SYMPTOMS.

By JOSEPH SAMPSON GAMGEY, Esq.

In the month of February last, I was requested to see a patient with urethral discharge, by a friend who had been treating him for about a fortnight, to no purpose, with the ordinary remedies for gonorrhœa.

I found the glans uncovered, red, and swollen; the prepuce œdematous and also red; but their surface was otherwise dry and perfectly healthy. On pressure along the course of the urethra, a small drop of green thick pus appeared at its orifice. The discharge had from the first been very scanty. In the left groin was a lymphatic gland about three times the normal size. The last mentioned symptom, conjoined with the scantiness and viscosity of the discharge, the considerable amount of inflammation about the prepuce, and a knowledge of the fact that gonorrhœal remedies had proved of no use, led me to suspect the existence of chancre within the urethra; accordingly, on opening out its orifice, a small sore with greyish surface and bright red sharply cut edge was visible just within it.

Had the urethral sore healed before it came under my notice, the secondary syphilitic symptoms which would in all probability have succeeded, would have been attributed by the practitioner to gonorrhœa; and this would have added another to the list of badly observed cases invoked by the disciples of Hunter's doctrine (who hold the virus of syphilis and gonorrhœa to be one and the same) as proof of such identity.

As an additional guarantee of the chancrous nature of the urethral sore, a little of the pus from its surface was inoculated in the thigh, and here a well marked chancre was fully developed about the fourth day.

The primary and inoculated sores were destroyed with nitrate of silver, a mercurial course was prescribed, and the patient was cured within a month.

A few days after I saw this patient, I detected a little fissure at the end of my left thumb, close to the attachment of the nail; it became exquisitely painful, and sensibly affected the general health. It was only after treating it several days without success, that it occurred to me that in the manoeuvre necessary to see the urethral chancre (grasping the glans and separating the lips of the meatus with the ends of the thumbs), it was very likely that a little of the virus had got beneath the free margin of the nail, and there produced a chancre.

At this time, the thumb was much swollen; the sore at its end was covered with whitish adherent slough, except at the edge, which was bright red; the lymphatics on the palmar surface of the forearm, and inner surface of the arm, were corded, and their situation was denoted by red lines on the skin. Two friends, who had from the commencement favoured me with their advice, consented to my proposal to inoculate on the arm some of the discharge from the sore, and destroy it with nitric acid; with the double view of arresting the diseased local action, and ascertaining whether it were syphilitic, and mercurial treatment advisable.

The pain and swelling abated very considerably after the cauterisation, and nothing whatever appeared at the two spots on the arm, where the pus had been inoculated. The last fact was deemed proof of the non-syphilitic nature of the disease, and confirmatory of the opinion my friends had from the commencement entertained, that the sore was

merely dependent upon rather assiduous application, and consequent impairment of health.

When the eschar produced by the nitric acid separated, it left a weakly looking surface, which, in a few days however, improved, as did also the general health and the condition of the arm; the corded lymphatics having almost disappeared. But this was only a temporary change; the sore again became painful, and acquired its suspicious look, with whitish surface, red and sharp cut edge; moreover, it was now raised on a hardened base; the lymphatic cords on the forearm became very manifest; one of the axillary glands enlarged; and seven weeks from the origin of the sore, a well marked copper coloured roseola made its appearance on the palms of the hands and trunk. The problem was now solved, and the moment for decided action arrived. I destroyed the primary sore with strong nitric acid,* and commenced a mild course of mercurial treatment. After the lapse of another week, the skin affection had quite disappeared, the affection of the lymphatics almost so, and the sore had quite healed; but a good deal of induration remained at its base, and pathognomic sores formed on both tonsils. Both these complications slowly but progressively yielded to corrosive sublimate and sarsaparilla, followed by iodide of potassium.

REMARKS. The study of this case suggests two facts for special consideration—the failure of the inoculation, and the error in not diagnosing the primary sore from its history and anatomical characters.

Were it not that the surgeon who performed the inoculation has frequently practised it successfully, the validity of the experiment might be questioned; but under present circumstances, the failure tends to lessen the value of inoculation, as a means of ascertaining the syphilitic character of a suspicious sore. But it is just to observe that almost invariably, the inoculation of the discharge from a primary venereal surface, does produce a chancre. Indeed, amongst a very large number of experimental inoculations of undoubted chancrous pus, I have only seen one failure besides my own case. That occurred in a young man, the subject of chronic phthisis; he had had a chancre at the frænum for about three weeks, and it had destroyed a considerable portion of the glans. I performed three inoculations on the same patient with pus from the surface of the sore; they all failed. The primary sore healed after being twice cauterised with nitric acid. Any doubt as to its true syphilitic nature, was removed by the appearance in little more than another fortnight of syphilitic ecthyma in its most severe form.

Apart from experimental inoculation, there were, I now think, sufficient grounds for diagnosing the sore as syphilitic. The idea of my friends, that it was a common sore due to impairment of the general health by hospital work, had no better foundation than their kind hope that it should prove to be such; for it had none of the appearance, either at its commencement or during its progress, of the weakly sores that occasionally form about the pulps of the fingers and roots of the nails in weakly constitutions. Its bright red sharply cut edge, the white adherent slough on the surface, the burning pain, corded state of the lymphatics, the hardened base, conjoined with the fact that, just before its appearance, I had exposed myself to the risk of inoculating the thumb; that the general health was excellent; that when it failed, rest, fresh air, change of scene, and exercise, resorted to for its improvement, had no effect on the sore—appear to have been sufficient grounds for the

* I have been in the habit of giving chloroform in cauterising chancres; but my experience in this case, conjoined with the rather numerous accidents from this anæsthetic of late recorded, which suggest the propriety of only resorting to it when really necessary, and then with the greatest precaution, leads me to question whether in many of these cases the preventive is not as severe as the pain. Certain it is, that I suffered greatly from the chloroform for nearly thirty-six hours afterwards—great prostration, headache, and vomiting; but when, having determined upon the necessity of reapplying the nitric acid, I, in the absence of a friend, in a village on the banks of the Rhone, applied it myself, the pain was severe, it is true, but ceased in a few minutes; and whereas I had not rested for many nights, I fell off to sleep half an hour afterwards, slept soundly ten hours, and was enabled to resume my journey in comparative ease.