A CASE
IN WHICH
A LARGE POUCH WAS FORMED IN THE
ŒSOPHAGUS,
IN CONNECTION WITH
CONTRACTION OF THE CANAL.

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Received May 24th—Read June 22nd, 1847.

JUDGING from the circumstance of so few cases having been furnished by medical authorities, the formation of a sac or pouch in the œsophagus, in connection with stricture of this canal, is of rare occurrence. This lesion, however, has been noticed by Isenflamm, Sandifort, Meckel, Copland and Rokitsansky. Two cases, in which it was found after death, are also described by Mr. Ludlow of Bristol, and by Sir Charles Bell.

The case observed by Mr. Ludlow was published in the 3rd volume of Medical Observations and Enquiries, in 1764. The subject of this case was a man aged 60 years, who attributed the commencement of his disease to a cherry-stone which had lodged in his throat about five years before his death; dysphagia, &c., gradually supervening. Upon examination after death, a muscular bag was seen passing down between the œsophagus and vertebræ. The inferior point of this bag reached some little way into the cavity of the thorax,

hanging quite loose and situated principally on the right side. A probang could be made to enter easily along the œsophagus; and, by giving the point of the instrument a turn forwards, to pass readily into the stomach. The bag was stated to have been formed by a dilatation of the entire substance of the posterior part of the pharynx, the structure being so equal that it was impossible to ascertain at what particular part the dilatation began. Mr. Ludlow has entered into a full explanation of the reasons wherefore this dilatation had taken place whilst the passage along the œsophagus still remained; and has shown that, the opening into this sac having been wider than that into the œsophagus, no food could pass into the latter until the former was filled: but I must refer to the case itself, and to the plates given with it, for further details.

A somewhat similar case to the foregoing is described by Sir C. Bell, in the second volume of his *Surgical Observations*. A gentleman applied for the relief of a disease of the throat, occasioning difficulty of deglutition. Many inefficient attempts were made to pass a bougie. In carrying the point towards the back of the pharynx, the obstruction was so great that the operator would not venture to press with force. By giving the instrument a turn laterally, the point was brought to pass by the side of the throat, and moved along the lateral part of the pharynx down to the proper canal. It was observed that when the bougie was introduced it was not grasped, nor was there any impression on the soft wax. The operation was repeated at intervals of a fortnight, and the symptoms were always relieved by the passing of the bougie. The patient's death does not appear to have been caused by the complaint in his throat, but by what cause is not stated.

Upon examination after death, a bag was found projecting from the lower and posterior part of the pharynx, and pushed into a space between the œsophagus and spine. The bag was not covered with muscular fibres, but was described as a hernia or protrusion of the inner coat of the pharynx between the fibres of the muscular coat.

Sir C. Bell concludes by adverting to Mr. Ludlow's case ; and, with an ingenuity which ever distinguished that great surgeon, proceeds to reason upon the two cases. His opinion is at variance with that of Mr. Ludlow as to the precise nature of the lesion : for he does not consider the sac to have been muscular in that case, but to have been caused, as in the case described by himself, by the protrusion of the inner coat of the pharynx through the fasciculi of the constrictor pharyngeus. This he believes might have been occasioned by the repeated and ineffectual gulping, or efforts to swallow. I now proceed to state the following case :—

Col. D——, aged 69 years, of a robust constitution, indulged during the greater part of his life a very great appetite. Three years before his death he experienced slight dysphagia, which continued without any increase for eighteen months, his general health continuing unimpaired. During this period he consulted an eminent practitioner in London, who, judging from his excellent state of health, looked upon his symptoms as arising merely from a slight spasmodic affection, and dismissed him with the impression that no serious disease existed. No restrictions having been imposed upon him as to diet, he continued to indulge his appetite as usual. In January and February 1846 deglutition became more and more impeded, and was accompanied by emaciation ; but although he was residing in London at that period he did not have recourse to medical advice. In July he visited Lowestoft, and I was consulted. There was then great difficulty of swallowing, especially the more solid articles, which required the most complete mastication before they could pass into the œsophagus, the passage being attended by a gulping noise. A fluid, resembling saliva, was constantly secreted, and frequently voided from the mouth to the amount of a pint or a pint and a half in the twenty-four hours ; and was occasionally mixed with food. As a consultation was proposed with Mr. Crosse, of Norwich, I deferred an examination until that gentleman should be present. A probang was first introduced, the point of which was resisted below the

cricoid cartilage. A slender wax bougie was next employed, which Mr. Crosse conceived had advanced beyond the apprehended seat of stricture; but this admitted of doubt, owing to the appearance of the instrument when withdrawn. Subsequent attempts to pass it beyond the apparent seat of obstruction proved abortive.

From this time the patient lingered on, emaciation increasing. Notwithstanding injunctions to adopt a liquid diet, he daily persisted in the use of solids. It was frequently remarked that during a meal, a portion of food appeared to be swallowed and for a time retained, but was shortly afterwards returned very little changed; regurgitation taking place in a way similar to the rumination of animals. Eventually the patient became incapable of receiving any food into his stomach. Three weeks previously to death, which took place on the 21st October, he was sustained solely by a pint of strong beef-tea, containing a glass of sherry, injected into the lower bowels every eight hours.

Upon examining the body after death, the pharynx, œsophagus, larynx and trachea were carefully removed for closer inspection. The parts being cleared of cellular substance, a bag or pouch was discovered projecting from behind the œsophagus, opposite the cricoid cartilage, and hanging down between the trachea and œsophagus and the cervical vertebræ; it measured three inches and a half in length and two and a half in circumference, and was in shape not unlike the finger of a glove. Nearly two-thirds of this pouch were covered by muscular fasciculi derived from the pharyngeal constrictors, the fibres of which were more developed than in health. The pharynx was laid open by an incision commencing at its upper and posterior border, in the direction of the median line, and continued into the pouch two-thirds of its length. This exposed the entire pharyngeal cavity, which was dilated very far beyond what was natural. The opening from one cavity into the other was perfectly free; and the two, when expanded, presented a funnel-like appearance, capable of holding nearly two pints of fluid. Immediately behind the cricoid cartilage,

and on a level with the commencement of the pouch, existed a stricture, formed by a transverse fold of the mucous membrane, that would admit only a large-sized urethral bougie. The Œsophagus below the stricture was much contracted, but the mucous surface was perfectly healthy.

This wood-cut represents the posterior view of the pharynx, showing the situation of the sac.

A. Pharynx very much dilated. B. Epiglottis. C. Stricture shown by the introduction of a bougie. D. The sac laid open. E. Trachea. F. Œsophagus.

After considering the history of this case, the following questions suggest themselves:—1st. How many cases, similar to or identical with the one now related, be recognised with tolerable accuracy during the life of the patient? And 2ndly. What is the best mode of treating them? It may be remarked, with reference to the first question, that cases of this kind occur so seldom, that a correct diagnosis is formed with difficulty; and the difficulty will exist until the early history

of similar cases is correctly observed and recorded. It may be remarked, that in neither of the two cases published by Mr. Ludlow and Sir C. Bell did any stricture exist, although the patients were treated for stricture. The pouches found after death were entirely unlooked for. The formation of pouches or sacs, such as were found in the present case and in those referred to, is most likely to be caused by stricture, and therefore to be ascribed to, and confounded with, that lesion. The existence, however, of a stricture may be readily inferred from symptoms; and, when existing simply, is easily ascertained. But the presence of a pouch, such as was found in the former cases, may prevent the existence of stricture from being ascertained during life, as occurred in respect of them; and the co-existence of a pouch with stricture may suggest the latter lesion without the recognition of the former. There is, however, one symptom which was present both in Mr. Ludlow's case and my own, which may assist in the diagnosis; and this was the peculiar way in which the food was regurgitated after having been apparently swallowed; a slow regurgitation of it taking place at various periods after it had been taken. In an ordinary case of stricture, the patient is generally unable to swallow more consistent matters; or, if the attempt be made, they return immediately, attended by a distressing sensation of suffocation. Columbat's speculum might be made available in cases similar to the present; for an ulcer seated at the rima glottidis may be brought into view by its assistance.

As respects treatment, I am not prepared to suggest any means worthy of attention. If, however, a similar case to the one now stated were to come under my care, or one in which the existence of a pouch was ascertained, I should act as much as possible according to the suggestion of Sir C. Bell, and endeavour to introduce a tube into the œsophagus, through which the patient might be fed, so as to prevent the passage of any food into the pouch. The practicability, also, of syringing the pouch with astringent injections might be entertained.

The formation of the pouch in the present case may be easily explained. As soon as an obstruction to the free passage of food along the œsophagus commenced, the action of the pharyngeal muscles, propelling the alimentary bolus against the stricture, distended the part intervening between these muscles and the stricture; and as the disention increased, one portion of the parietes of the part yielded more than the rest, and at last formed the pouch found on dissection. Had the stricture been discovered at an earlier period of its formation, it is more than probable that the disease might have been arrested or greatly palliated by a judicious employment of bougies; for, upon examination, it did not appear that any degeneration of structure existed.