

THE
JOURNAL OF LARYNGOLOGY,
RHINOLOGY, AND OTOTOLOGY.

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MALIGNANT DISEASE OF THE ŒSOPHAGUS.

It is not too much to say that the introduction to the discussion on the diagnosis and treatment of malignant disease of the œsophagus, read by Mr. Charters Symonds at the recent meeting of the Laryngological Society of London,¹ will rank as a classic. As a statement of our present knowledge, in the light of the great experience of the author, and the enormous amount of thought he has devoted to the subject, the manner of dealing with it leaves little to be desired. If there is anything that could add to its value it would, however, be a description of an actual series of cases investigated and treated on the principles enunciated in his paper. Such a combination would make a book which all self-respecting surgeons would procure and study with avidity, not merely in this country, but in all the civilized countries of the world. The paper will be reported in full in this Journal, and we most cordially commend it to the attention of our readers. The following is, however, a résumé of the contents and of the subsequent discussion.

As a rule, a case of carcinoma of the œsophagus is characterized simply by a history of a gradually developing difficulty in swallowing, at first for solids and then for liquids, according to the recognised description. Mr. Symonds has, however, noted that occasionally the onset, instead of being gradual, is sudden, coming on, for example, in the course of a meal. In one of his cases it

¹ June 6, 1902.

developed after vigorous shouting on the part of the patient. In other instances the chief symptom has been a loathing for food or actual pain on swallowing. Strangely enough, carcinoma of the œsophagus may, by rapid breaking down, fail to produce any actual obstruction, and cases simulating anæmia or cancer of the stomach have been found, on post-mortem examination, to present this widening ulceration instead of contraction of the tube. Some cases have been long treated for dyspepsia, and in these he attributes the emaciation rather to the restriction of diet than to the disease itself. The appearance of the patient when trying to swallow is fairly characteristic, but it is on the passage of the bougie that the diagnosis depends. As a practical hint, he pointed out the advisability of passing the bougie past the cricoid during inspiration, and while the act of swallowing was performed, the inspiration leading to the drawing-down of the larynx. The danger of entering the trachea is not an imaginary one, and it may very readily occur in patients in whom insensibility is present, owing either to the administration of an anæsthetic, or to paralysis of the sensory nerves of the part.

Probably the most salient point in the paper was the variation in diagnosis and treatment according as the disease affected the upper, the middle, or the lower third of the œsophagus. In the upper third the obstruction was practically always malignant, and accompanied by a strong tendency to cicatrization and irregular contraction. There were three conditions apt to simulate malignant disease of this part, namely, senile dysphagia, nervous dysphagia, and an œsophageal pouch. *En passant*, the second of these conditions gives rise to a good deal of difficulty, especially when we remember that it occurs as an inaugural symptom of commencing carcinoma. When there is any difficulty as to the prognosis, the writer considers it best to give an opinion against malignancy and wait till further developments lead to the reconsideration of the opinion. No doubt this recommendation, if somewhat casuistic, is well founded, but whether it depends upon humanity or probability the paper does not make quite clear. Carcinoma of the adjacent portion of the pharynx may give rise to many of the same symptoms, but it is generally accompanied by more pain, and a peculiarity of the voice resulting from the coincidental œdema of the larynx; moreover, a growth in this region is generally visible on laryngoscopic examination. As a general rule, in the case of carcinoma of the upper third of the œsophagus, the introduction of a soft rubber feeding-tube for permanent retention is recommended.

Stricture in the middle third of the œsophagus, though usually

carcinomatous, may be produced by myoma or sarcoma. Although aneurisms and intra-thoracic growths are generally credited with producing difficulty in swallowing, Mr. Symonds considers it extremely rare for them to give rise to any great degree of dysphagia. During the passage of a bougie in a case referred to him in which no aneurism was believed to exist, he was conscious of a sensation of pulsation as the bougie passed down, and subsequent events confirmed his opinion that an aneurism was present. An œsophageal pouch may simulate disease in this region. As a rule, a malignant stricture in the middle third of the œsophagus is ideally treated by Mr. Symonds' well-known tubes.

The lower end of the œsophagus—15 to 17 inches from the teeth—is the one part where simple or spasmodic obstruction is most likely to occur. Very similar symptoms may present themselves in the case of extreme contraction of the stomach. Among the earlier symptoms are dyspepsia, nausea and central pain. A bougie may be used with considerable confidence, and it is at this region that the *coudé* form of bougie is sometimes extremely useful, and may be successfully passed when a straight one has failed. In general, treatment for stricture in this position is early gastrostomy.

With regard to treatment of malignant disease of the œsophagus, Mr. Symonds' views were, in general, unfavourable to any attempt at radical removal of the disease, and he looked upon tubage and gastrostomy as the only methods of treatment worthy of serious consideration. As long as the patient could swallow fluids and soft solids, and bougies could be easily passed, no operation was justifiable; if, on the other hand, dysphagia increased beyond this, a tube should be introduced or gastrostomy performed; if neither the bougie could be passed nor swallowing was possible, operation was immediately called for. It was to be remembered that the bougie was not intended for dilatation, but simply to secure a route into the stomach. Here another practical suggestion was given, namely, that the tube was passed best after a night's rest and a dose of opium.

The selection of method of treatment varied according to the situation of the disease in the œsophagus. In the upper third the introduction of a long soft rubber feeding-tube was found to be the best treatment, and if that failed there was no alternative but gastrostomy. He quoted Mr. Berry's observation that the very softest indiarubber tube would keep an œsophageal stricture open; he found Jaques' tubes too thick, but a very soft indiarubber drainage-tube served the purpose extremely well. It was neces-

sary, however, to close the deeper extremity; this could be done by the instrument-maker or by the surgeon simply stitching up the end of the tube with a needle and silk; two "eyes" were then cut and the tube was guided into position by means of a whale-bone director inserted into the "eye," and not passed through the tube itself (no doubt the tube could be passed through the nose and the director through the mouth); such a tube might be kept in for many months without being once removed; its outer extremity should be fitted with an aluminium mouthpiece and plug; we presume that it can be passed either through the mouth or the nose, but in the absence of any contra-indication the latter would be probably the more convenient passage. This treatment is sometimes efficacious when the patient is "too low" to undergo gastrostomy. If, however, the patient is intolerant of the tube, there is no alternative but to perform gastrostomy, as complete obstruction is inevitable.

The central portion is the most suitable for the use of Mr. Charters Symonds' short tubes. They should be about 4 inches in length, and should terminate like a catheter, with two large lateral "eyes," and not with a bent end. The most suitable cases he considers to be those of short contracting stricture as measured with the steel bulb. The passage of a small piece of indiarubber drainage-tube over the silk thread is of practical value in order to prevent the silk from being bitten through. The contra-indication for the use of this tube is the presence of cough and hæmorrhage.

In disease of the lower third no tubes of any kind are tolerated, and they are rejected by the action of the diaphragm. It is, therefore, necessary to perform gastrostomy if the dysphagia increases and swallowing can no longer be performed nor bougies passed. This operation is all the more hopeful in view of the possibility that a stricture in this region may turn out to be simple in nature and to improve under gastrostomy. As before said, a *coudée* instrument may sometimes traverse such a stricture, and prove useful for feeding a patient. After gastrostomy the passage of the tube may be easier than before, and swallowing may be less difficult, perhaps, because the operation involves the pulling forward of the stomach and thereby a straightening of the œsophagus.

When tubes are passed under an anæsthetic, Mr. Symonds considers it extremely easy for them to enter the larynx, and he therefore checks the position of the tube by means of laryngoscopic examination. With regard to gastrostomy, it is considered desirable that it should be done as early as possible.

In the discussion which followed several points not touched

upon by the lecturer were brought forward. Thus, Dr. TILLEY described a most interesting case in which a cancerous gland associated with carcinoma of the œsophagus ulcerated into the trachea; he drew attention, also, to the well-known phenomenon of paralysis of a vocal cord as a common result of involvement of the recurrent laryngeal nerve in malignant disease of the œsophagus, a point to which Mr. Symonds had curiously omitted to refer.

Sir FELIX SEMON noted further instances of laryngeal paralysis from the same cause; he referred to the occurrence of secondary infection of the glands behind the clavicle. In relation to anæsthetics, he narrated a case in which the "extra whiff" of chloroform required for further examination of the œsophagus was followed by death.

Dr. BEALE referred to the Röntgen rays as of value in diagnosis, pointing out that the shadow in case of carcinoma of the œsophagus was sharper than that given by enlarged glands. He thought that the restoration of the power of swallowing by gastrostomy was attributable, to some extent at least, to the cleaning of the œsophagus, and on this principle he had ordered patients to drink hot water so as to wash out the œsophagus after meals. He narrated the traditional anecdote of Sir Astley Cooper, who, seeing a patient in a medical ward in Guy's Hospital sitting up, and from his cachectic appearance obviously the subject of malignant disease, but without any other symptoms, stated that the patient must be suffering from cancer of the œsophagus, as that was the only situation in which cancer could exist without giving rise to symptoms.

Mr. BETHAM ROBINSON dwelt on the diagnostic importance of enlargement of the cervical glands, and narrated a remarkable instance in which dysphagia simulating carcinoma of the œsophagus was produced by a deep-seated adenoma of the left lobe of the thyroid gland.

Dr. DUNDAS GRANT narrated some cases in which he had experienced difficulties in the diagnosis, as, for instance, in spasmodic stricture of the œsophagus reflexly excited by malignant disease of the abdominal organs, and in which he thought the administration of an anæsthetic, in spite of its risks, might have led to a more accurate diagnosis. In another instance a large-sized bougie had passed without difficulty, but the patient died several months later with symptoms attributed to malignant disease of the œsophagus. In certain cases it was difficult to say whether the disease arose primarily in the œsophagus or the thyroid gland. In reference to the use of the Röntgen rays, he

referred to a case in which the shadow indicated a growth round the œsophagus, which did not pulsate, and was assumed, therefore, not to be an aneurism. The patient died as the result of a sudden copious hæmorrhage, and the question arose as to whether, after all, the data afforded by the Röntgen rays had not been misleading and that the disease was an aneurism; he thought that hæmorrhage was not an unlikely termination in cases of cancer of the œsophagus, and asked the members of the Society for their experience. He recalled Dr. Michael's ingenious use of a tracheotomy tube with a dilating sponge covered with indiarubber in cases of tracheo-œsophageal fistula. Michael, by the introduction of this tube into the trachea, was able to keep alive for a period of over a year a patient in whom such a fistula existed.

Dr. DONELAN had been able, in a difficult case, to pass as a bougie a piece of the third string of a violoncello when other instruments had failed. He inquired whether adrenalin might not be a valuable adjunct to the armamentaria as a means of diminishing the vascularity of the obstructing growth.

The PRESIDENT asked for opinions with regard to the value of œsophagoscopy, and, further, as to the risks of gastrostomy, with regard to which the laryngologist was called upon to give an opinion, even though he did not himself perform the operation.

Mr. SYMONDS considered that gastrostomy, if not left till too late, was an operation with extremely little risk; he considered it necessary that it should be so conducted that a sphincter to the opening, such as that afforded by fibres of the rectus muscle, should be provided. He felt certain that in time some methods simpler than those in vogue would be discovered. In the earlier stages of carcinoma of the œsophagus, where a thick bougie failed to detect a stricture, the steel bulbous bougie was sometimes successful. In general, he was unfavourable to the adoption of radical operations for this disease.

It will be seen that the subject in question received very valuable consideration, and that the difficulty in the selection among the methods of treatment in any given case had been considerably clarified. It seems to us that the distinction between the methods of treatment of the disease according as it is situated in the upper, middle or lower third of the œsophagus, is highly convincing, and that all who have to deal with such cases will feel grateful to Mr. Charters Symonds for the light that he has afforded them.