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Clinical Lectures

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BY

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LECTURE IX.—ON ŒSOPHAGEAL DYSPHAGIA.

Narrative of Case. Analysis of Symptoms. Seriatim Examination of the Alternatives of the Diagnosis. Prognosis. Treatment:—Feeding; Indications of Local Treatment; Importance of avoiding Mechanical Interference.

GENTLEMEN,—Some short time ago, we had an opportunity of observing some cases of what I call tracheal dysphagia—difficulty of swallowing depending on inflammation of the mucous membrane of the windpipe—and I made them the subject of a lecture to you. I wish to-day to offer you some remarks on a case of dysphagia very different from these, which illustrates very well the principles of the diagnosis of these cases, and which is interesting to us not only intrinsically, but from the strong contrast which it offers, both in the symptoms and the prognosis, to the cases which were the subject of my former lecture:—those cases were transient, this is permanent; those were functional, this is organic; those were affections of a respiratory organ, this of an alimentary; those patients all recovered, this man will die.

Henry Norris, aged 50, by occupation a commercial traveller, temperate in his habits, had venereal disease twenty years ago. Up to April of this year, 1864, his health was perfectly good; at that date he suffered from what he calls scurvy—purpura of the legs (which were all the colours of the rainbow, especially purple), profuse epistaxis, and bleeding from the mouth, throat, and gums, which were very tender; the gums, he says, came entirely away from the teeth. In this condition he entered one of our Metropolitan hospitals, and was under treatment for five weeks, when he left free from all his symptoms. His doctors attributed them to want of vegetable food, and the man himself thinks that want of nourishment, and general privation, may have had a great deal to do with producing them.

Previous to leaving the hospital, now eight or nine weeks ago, he called the attention of the physician who was treating him for the scurvy to a pain that he experienced on swallowing, which he then felt for the first time in his life. It was situated then, and has

been ever since, beneath the lower part of the sternum, and was felt as each mouthful passed or reached the spot, and only then. On making oral and pharyngeal deglutition there was no pain, and a distinct interval elapsed before the pain was felt; moreover as soon as the mouthful of food had passed the spot the pain ceased, and he would feel no more of it; so that he experienced at a meal as many independent attacks of pain as he swallowed mouthfuls, and as soon as the meal was over was perfectly free from pain. He describes the pain "as if there was a dreadful sore place, and something hard was pressing on the raw skin; as if it was tearing his flesh from him." At that time it did not shoot through to the back, but for the last few days it has. I said just now the pain was felt as each mouthful "passed or reached" the spot, and I said "passed or reached" because sometimes it reached it without passing it, but came up again into the mouth, generally immediately, one mouthful coming up before the next was swallowed; sometimes, however, a mouthful, or even two, or three, or four, one after another, would stop and lodge at the painful part, and then all come up together. He knew when this was taking place from the continuity of the pain, which was not in this case transitory as when the food passed, or was returned at once. Whether the pain was as severe when he first felt it as it has been since, he cannot remember, but he is sure that within three or four days of its commencement it was extremely severe—as bad, he thinks, as it has been since. He felt it most at breakfast (and so indeed he does now), and it is at breakfast that the food stops and comes back again most. He will sit down to his breakfast feeling perfectly well, with only a slight sensation, as of indigestion, beneath the bottom of the sternum, and commence eating, but the moment the first mouthful reaches the part affected the pain is felt in all its severity, and the mouthful probably comes up. He swallows another and that comes up, and another and that comes up, and so on. At first, after a certain number of mouthfuls had thus come up in succession, sometimes as few as six mouthfuls, he would suddenly swallow perfectly easily, without any pain, and with no return of food. Sometimes, however, it would be a dozen or twenty mouthfuls that would thus return, and on one occasion as much as two whole pieces of toast thus came up in successive mouthfuls, and after that the swallowing was perfectly easy, and he made a hearty breakfast. Of late, however, for the last five or six weeks, the pain has been so great and the return of the food so uniform, that after persevering in swallowing for some time he has given it up in despair, and abandoned his meal. At the first part of the case, when the commencement only of breakfast was painful, the subsequent meals, dinner and tea, would be free from pain, and have no return of food; of late, however, the subsequent meals have been nearly as bad as the breakfast, but never quite. Thus, it was the first meal of the day that was the worst, and the first part of each meal. On the whole it is clear that the state of things has been getting progressively worse, and for the last four or five weeks he has hardly got any solid down.

As a result of this he is rapidly getting weaker, and is now extremely feeble and thin. In dressing in the morning he is obliged to sit down and rest himself, and in walking is often compelled to sit on a doorstep. The slightest exertion makes him break into a perspiration. He is constantly hungry though he dares not eat.

As he sits by me, while I am taking notes of his case, I hear from time to time—every three or four minutes—a peculiar glutching noise, which seems neither so high as the throat nor so low as the stomach; he says it is quite involuntary, and that he frequently notices it, and that when it occurs, it is a warning to him that the passage is free. He refers the sensation that accompanies it to the sternum.

On seeing him for the first time, among the out-patients, I introduced a probang which I passed down three or four inches into the œsophagus, and then I could get it no further, whether from some obstructing material, or from the resistance of the œsophagus itself, I cannot tell; but the œsophagus gripped the sponge so firmly that I had great difficulty in getting it back again. It evidently caused the patient great distress, and the pain it produced lasted for some minutes afterwards.

On the day before he saw me, he brought up, for the first time, a piece of blood, in the form of a clot, as big as the end of his finger. On the morning of the next day (the day that I saw him) when washing, as he stooped his head to the basin, a still larger piece came into his mouth, black and clotted like the other. In the evening of the same day, a much larger piece came up, in the form of a cylindrical clot, as long as his middle finger, and about the same size, and I think there can be no doubt that it was moulded in the œsophagus. Whether it was the result of the violence done to the œsophagus in introducing the probang, I cannot tell; the man himself thinks it was.

On Tuesday, October 25th, three days after the above notes were taken, this patient was admitted, as an in-patient, into the hospital. I placed him immediately upon a liquid diet, to see what the effect of that would be, and the result was that he got nearly the whole of it down. I gave him in the course of the day two extra pints of milk, four eggs beaten up with it, beef-tea, and a custard. Some portions of it were returned, but the chief part passed, and, as a consequence, the man decidedly gained strength. Before, on a solid food, he was starving—now, on a liquid food, he was fairly nourished. On the day that he was admitted, a small clot of blood was raised: three days afterwards, a considerable clot of the old shape rose into the mouth and was expectorated, and the next day another was shewn me. This was on Saturday, October 29th; and, as the patient was shewing it to me, he remarked that he was sure he had another on his chest, for he could feel it there. I had not left the ward a minute, before I was called back to see a large clot, of the same shape as before, and about three inches long, that had just come up. With the view of stopping the bleeding, I then ordered him five minims of dilute sulphuric acid and twenty grains of kino powder, in a teaspoonful of mucilage, to be swallowed every four hours. From that time to this, now twelve days, no blood has appeared.

For the first four or five days, our patient swallowed, as I have mentioned, wonderfully better, apparently in consequence of taking nothing but liquid food, and, as a result, daily gained strength and improved in appearance; but for the last week the swallowing has been gradually getting back into the old condition—less and less has been got down, and now hardly anything passes, although nothing is

attempted to be swallowed but fluids. There is, however, the same irregularity in this respect as there has been all along; and last night, after every previous meal in the day had, mouthful by mouthful, been returned, he swallowed a basin of arrowroot perfectly well, without the slightest pain or the slightest obstruction.

For the last four or five days, he has experienced a constant pain in the back, just between his scapulæ, corresponding to the spaces of the sixth and seventh dorsal vertebrae. He is decidedly losing strength day by day, and is much weaker than he was ten days ago.

Such, then, is the history of this case up to the present time. To-morrow, the man, by his own wish, leaves the hospital; and I was anxious, before he went, to make some observations upon his symptoms; for in many points they are highly interesting and instructive.

The four principal symptoms which we find are:

- a. Pain on taking food, of a particular kind, at a particular place, and occurring at a particular time.
- b. Obstruction to the passage of food.
- c. Return of the food into the mouth after having been swallowed, and without vomiting.
- d. Hæmorrhage—the raising of clots of blood of a particular shape, without vomiting, and without cough.

Now, let us see if, out of these four symptoms, we can construct a diagnosis. It is in relation to diagnosis that the case is chiefly interesting; it affords a very good example of the way in which symptoms are mutually corrective; of the way in which they eliminate, one by one, the alternatives that suggest themselves, and contribute, each its mite, to the construction of the only true and tenable hypothesis.

Our first impression on seeing this man among the out-patients was that he was suffering from ulcer of the stomach. The symptoms that he complained of were—pain on taking food, the pain coming on immediately on taking the food; return of food; and the bringing up of blood, evidently not coming from the lungs. If one were asked what were the most suggestive symptoms of ulcer of the stomach, one would probably mention these four. And it is evident that the physicians of ——— Hospital, under whose care he was, men of great ability and one of them having a special reputation for a class of diseases under which this man's case would fall, were under the impression that his trouble was gastric; for one of them ordered him a mixture containing rhubarb, and the other added to this bismuth. A very slight extension of our inquiry, however, sufficed to show us that this could not be the case. The circumstance that corrected this impression was, that each mouthful the moment after it was swallowed caused an individual access of pain, and that the pain was transitory—the end of the swallowing of the meal being the end of his sufferings, and the digestion of it, from its very commencement, unattended by any pain whatever. I do not mean to say that it is absolutely certain that these features of the pain shew that the seat of it *must* have been in the œsophagus and *could not* have been in the stomach; for it is just possible to conceive that a gastric ulcer just within the œsophageal orifice might give rise to a momentary pain as each mouthful, passing over it, entered the stomach, and

that at the same time it might be sufficiently out of the way not to be irritated by the general contents of the stomach during digestion. But if it is possible to entertain such an hypothesis, the supposition is immediately corrected by another circumstance, and that is, that the individual mouthfuls were returned again to the mouth without any act of vomiting. Now, if the food had entered the stomach, it must have been returned by the stomach—in other words, by an act of vomiting; but this, in fact, never occurred—the man never *did* vomit. It is clear, then, that the food never reached the stomach; and if it never reached the stomach, the seat of the pain that it caused could not have been *in* the stomach.

But there was another circumstance that the subsequent history of the case furnished, that to my mind clearly shewed that the mischief was œsophageal, and that is, the shape of the clots of blood that were from time to time raised. These were cylindrical and all alike, of just such a shape as one can imagine moulded in the œsophagus, and not such a shape as one can imagine moulded in the stomach. They were all of the same calibre, though not of the same length; and on looking at them, one could not resist the impression that they were moulded in a tube. Now, if these clots were formed in the œsophagus, the question of the seat of the disease is settled; for they not only shew where the blood was poured out, but, I think also, that there existed below the point in the œsophagus where the blood was effused such an obstruction as prevented it from passing down at once into the stomach.

The disease, then, having been determined to be œsophageal, what was it? Was it simple spasmodic stricture? Was the obstruction due to some pressure from without? Was it simple organic stricture, such as that which results from the slow contraction of old cicatrix? Was it due to aortic aneurism? Was it ulceration of some kind? and if so, what?

Let us now take these different hypotheses in succession, and test them by the symptoms, and see how they respectively bear the examination.

1. Was it simple spasmodic stricture? This hypothesis would be perfectly consistent with the pain, with the obstruction, and with the return of the food; but there is one symptom that it would not be consistent with, and that is the hæmorrhage. You may have spasmodic stricture *with* hæmorrhage, but you must have something *more* than spasmodic stricture.

2. Was it due to pressure of something from without, as of a tumour in the posterior mediastinum? Against this hypothesis would be ranged, not only the hæmorrhage, but the intermittent character of the symptoms—their severity at one time and absence at another. Such a cause as external pressure is what mathematicians would call “a constant”, and therefore cannot give rise to an inconstant result. There was, moreover, the negative evidence of an entire absence of all the signs of tumour.

3. Against the supposition of simple organic stricture, without any lesion beyond the organic narrowing—such a narrowing as would be the slow and gradual result of swallowing some corrosive poison, such as vitriol or caustic alkali—I think the objections are almost equally strong. Unless such organic stricture were very slight, and largely supple-

mented by spasmodic contraction, it would not be compatible with the occasional almost perfect freedom of deglutition; moreover, we should be here again met with the difficulty of the blood.

4. Was it aneurism? This was the first thing I thought of after I gave up the idea of ulcer of the stomach, and I think it is that which would be suggested, and reasonably so, to any one examining such a case as this. Indeed, I think one might broadly state that dysphagia, apparently organic and attended with considerable bleeding into the œsophagus, would point rather to aneurism than to anything else. At any rate, aneurism was what we did think of, and what we tried to find evidence of. But beyond the dysphagia and the blood, there was nothing to support it. There was no aneurismal *bruit*, no impulse, no percussion-dulness, no dyspnoea, no aneurismal cough, no stridor of voice or aphonia, no inequality of pulse or of pupil. The question then is, whether the symptoms present, in spite of all this negative evidence, were sufficient to prove the existence of aneurism. There can be no doubt, I think, that they were not. And besides, there are these two points, which the subsequent history of the case developed, dead against the aneurism hypothesis—one, that if the bleeding had been aneurismal, it would not have attained the extent that it did without having attained a much greater extent, would not have ceased, as it apparently has, but would probably have speedily become profuse, ungovernable, and fatal; the other, that it would not have yielded to the treatment to which it apparently did yield—the kino and sulphuric acid. You will remember that from the day the man took these styptics the bleeding ceased, although continuing freely up to that time.

5. We come now to the only remaining supposition that the symptoms were due to some organic intra-œsophageal lesion, producing at once obstruction and hæmorrhage—obstruction compatible with occasional freedom of passage, and intermittent hæmorrhage. If we suppose, in addition to this, that the organic disease produced occasional spasmodic stricture, or that it was of such a nature as occasionally to block the passage and occasionally not, and that it has been gradually increasing since it first gave signs of its existence, I think we shall have arrived at a diagnosis that will cover all the symptoms, and satisfy all the demands of the clinical history. The point in the history of the case that seems the least compatible with organic disease, is the freedom with which swallowing would be performed at one time and impassably obstructed at another. There appear to me to be two ways in which this might be explained: one, that although organic disease was present, as shewn by the blood and other circumstances, yet the principal obstruction was caused by spasmodic contraction of the œsophagus; the other, that the organic lesion was of such a nature as, by some plug or valve-like condition, at one time to obstruct the passage, and at another time not—that the intra-œsophageal growth, for example, might either be pressed against the side of the œsophagus and so allow the food to pass freely, or else be driven forward into the cavity of the tube and so offer a bar to its further progress.

Without saying that the œsophagus did not spasmodically contract, I am inclined to adopt the latter of these suppositions; for one can hardly

imagine spasmodic stricture existing in full force up to some particular mouthful in a meal, and then suddenly ceasing for the rest of the meal; it seems far more reasonable to suppose that this sudden change was of a mechanical nature.

The *prognosis* of such a case is involved in the *diagnosis*, and is necessarily unfavourable. Organic disease of the œsophagus of such a nature as I have supposed is more likely to be malignant than not. The further increase of the disease, which has already made swallowing almost impossible, will, by and by, make it quite impossible—everything will be returned, and the man will die starved. It is possible that, before the fatal event, other symptoms may shew themselves, dependent on the extension of the disease to contiguous parts, or on the more complete destruction of the œsophageal wall. For example, the extension of the ulceration may establish a communication between the œsophagus and the windpipe, and each mouthful swallowed may be coughed up through the glottis, as happened in an interesting case which occurred in my late father's practice many years ago; or the pneumogastric nerves may be involved in the disease, or other complications may occur.

As for the *treatment* of such a case as this, there is not very much to be done. Independent of the organic nature of the affection, its very situation interposes great difficulty in its treatment; there are, however, one or two points worth mentioning.

Perhaps the most important part of the management of such cases is the *feeding* of them. The direction in which death is threatened is by inanition; the prolongation of life, therefore (which is the thing the physician always aims at when the cure of disease is impossible), is best secured, and this catastrophe longest averted, by giving the patient such a food, no matter what it may be, as he can best swallow. We saw that this man, although starving on solids, became very fairly nourished when fed exclusively on liquids. By such a method of feeding, a great deal of strength may be regained, and the patient's life considerably prolonged. When the swallowing of liquids is impossible, nothing remains but to administer nutrient enemata.

The only *direct* treatment that can be of service in such a case must manifestly be local—no general treatment could possibly be of service in organic lesion of this nature. Now, there is a special difficulty in treating disease of the œsophagus *locally*. You may easily treat locally any part where there is naturally a delay of that which is applied to it, or is introduced into it. You may treat the mouth locally, you may treat the stomach locally, you may treat the rectum locally, you may, by inhalation, treat the air-passages locally; but to treat locally a part which merely transmits is very difficult—next to impossible. If you administer anything in any considerable quantity, it simply passes on. The only way to obviate this difficulty is to give the remedy in a quantity so small that it shall reach, and only *just* reach, the affected part, and not be passed beyond it. This is what I endeavoured to do; moreover, I endeavour to give it of such consistence as would be likely to adhere to the surface over which it passed. The limitation of quantity has, however, the disadvantage of limiting the dose of the remedy; for the application must not be stronger or more concentrated than the mouth will bear. This is why I was only able to give five minims of the sul-

phuric acid in the kino and mucilage I administered to arrest the hæmorrhage; for the quantity being, for the reason I have mentioned, limited to a teaspoonful, the amount of acid was also necessarily limited, or else it would have been too strong to have been comfortably swallowed. Five minims to the teaspoonful is forty minims to the fluid-ounce, and that, I think, is quite strong enough.

The objects to be aimed at in the local treatment of such cases are—the arrest of hæmorrhage and the diminution of the sensibility and irritability of the part. The former I endeavoured to achieve, and apparently *did* achieve, by the compound kino powder and acid in mucilage; the latter I succeeded in a great degree in compassing by a bolus of conium and hyoscyamus with a little opium. I must say, with regard to this last, that the disease itself made a local treatment possible that would otherwise have been very difficult, for the bolus was delayed, as I thought it would be, at the diseased part, and was gradually dissolved there, and exercised on it its full sedative influence. This was shewn by the fact that, after the bolus had been swallowed some hours, dissolved particles of it would rise to the mouth.

In conclusion, I have only one word to say in the way of warning: be very careful how you make exploratory examinations in such cases; be very chary of thrusting down probangs, or attempting to feed by the stomach-pump. The chance of getting additional information may be dearly purchased. In this case, the use of the probang appeared to be followed by an increase of the bleeding. But far worse than this might have happened—the instrument introduced might have been passed through the diseased wall of the œsophagus into the windpipe. This is no doubt what would have happened in the case that I have already referred to, that occurred in my father's practice; and this is what actually *has* happened. Nay, more than this, in attempting to feed with the stomach-pump a patient suffering from organic disease of the œsophagus, a surgeon has pumped a basin of gruel into his lungs, and killed him then and there. I say, then, beware of meddling too much with such cases in the way of exploration.

BUST TO DR. CORRIGAN. On the retirement of Dr. Corrigan from the office of President of the King and Queen's College of Physicians, it was resolved, at a meeting of the College, that a portrait of him, to be provided for out of the corporate funds, should be placed in the hall of the College, with a suitable inscription. It was further resolved, that a subscription should be inaugurated amongst the Fellows and Licentiates for the execution of a bust of Dr. Corrigan in marble. This movement was at first strictly confined to the members of the College, from whom, within a very short period, a sum considerably larger than would be required for a bust was procured. It was subsequently intimated that a very general desire existed on the part of the profession, as well as of the public, to contribute to this testimonial. The Honorary Secretary has been, therefore, authorised to receive the subscriptions of all persons who may desire to contribute, with the view of substituting for the bust originally contemplated, a marble statue by Mr. Foley, R.A., to be placed in the hall of the College, along with that of the late Sir Henry Marsh. Subscriptions may be forwarded to Dr. Lyons, 8, Merrion Square West, Dublin.