CLINICAL LECTURES

ON THE DIAGNOSIS OF

EXTRAPELVIC TUMOURS OF THE ABDOMEN.

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(Reported by W. RICHARDSON GOWER, ESQ.)

LECTURE III. (Concluded.)

Diseases of the Spleen causing Tumour in the Abdomen—Case of Emma H.—Case of Mrs. B.

I WILL now read you the case of Emma Hurren.

Acute Tubercularisation, Large Spleen, etc.—Emma H., aged 29, admitted May 25th, 1868. No history of phthisis in the patient's family. Patient's health was good till she came to London, two years ago. Before that time, she lived in Ipswich for a year, and previously in Yoxford, in Suffolk, not very far from some salt-marshes; but she never had ague, nor does she know that cases of ague ever occurred there. She has been married nine years, and has had three children and three miscarriages. All her children are dead—one by accident; two by diarrhoea, aged one and five years respectively. Her habits have been temperate. She had plenty of food, and lived in an open situation, till the last two months; since that time, she has been in want, and occupied a cellar-kitchen in a court in Holborn. Two years ago, she began to suffer at times from dull aching pain in the left side of the abdomen, increased by walking. At a hospital, she was told she had a "lump" there, and took quinine without benefit. Nine months ago, the pain became worse, and the "lump" bigger than it was before or has been since; and at the same time her legs and body swelled, and remained swollen for about a fortnight. During the last few weeks, she has been free from pain, but has been becoming thinner and weaker. She has no cough, but sweats much at night. She has not menstruated for the last nine months.

Present State.—June 3rd. The patient is thin; her eyes much sunken; pallor of face considerable. She can lie easily in any position, and complains of no pain or uneasiness. There is no headache. Tongue clean; appetite good; skin hot and dry; no rash. The temperature has varied since admission, at irregular intervals, from 100.5 to 104 deg., generally attaining its greatest elevation during the forenoon, and then sinking till night, when it will rise again. The pulse varies from 100 to 120. The respiration is about 24. There is no excess of white corpuscles in the blood. The patient has now a slight cough, without expectoration. The thorax is small and long. The right infraclavicular region is slightly duller than the left; there is no difference in respiration. Percussion and respiration are normal posteriorly. The heart is healthy. The spleen can be easily felt, reaching nearly to the crest of the ilium; its percussion-dulness reaches upwards to one inch below the nipple. The anterior edge is oblique, and the notch in it is very distinct. The posterior edge is perceptible behind. The tumour moves very distinctly with respiration. It appears to vary in size from day to day, the anterior edge coming an inch and a half more forward at certain times than it does at others. It is sometimes much less distinctly felt than at others, from intestines coming in front of the lower part. The apparent variations in size bear no relation to the variations of temperature. Between the last rib and the crista ilii on the right side, can be felt a body with a sharp anterior edge, apparently continuous with the anterior surface of the liver. The finger can be placed under the sharp margin. The lower border of the liver can be felt about two finger's breadths below the margin of the thorax; it is slightly tender. The urine is quite free from albumen. The patient sleeps well.

The patient continued to lose flesh and strength; the temperature to range between 101 and 103 deg. The pulse varied from 100 to 130. The cough became more and more frequent, hacking, and loose; some moist rales were superadded to the other chest-signs; vomiting supervened; and she died on June 26th.

You heard it stated in the history, that the patient had had occasional pains in the left hypochondriac region. It is always well to ascertain exactly the kind of sensation which the patients themselves vaguely term "pain." Only a few days ago I was in a court of law to give evidence. Dr. Walshe was at the same court; we had seen the patient together; I had attended him all through his illness; Dr. Walshe for a month or two. Now one medical man who gave evidence swore, with the most

perfect confidence, that the man suffered a great deal of pain, much to the astonishment of Dr. Walshe and myself, who were sitting by, listening to the evidence. The patient certainly had not suffered a great deal of pain in the sense in which I would use the word, or in which Dr. Walshe would have used it. He had an enormous amount of discomfort, so that he was almost ready to tear himself to pieces, but not at all what I should call pain, nor what I would teach you to call pain. The swelling of the body, mentioned in the account of this case, was probably the result of disturbed digestion *plus* "the lump in the belly". Remember what I told you in a former lecture; how patients with abdominal tumours frequently do not suffer distension from the tumour till they have excessive accumulation of flatus, and then, in consequence of the presence of the tumour, an amount of flatus which would not by itself cause uneasiness, gives rise to very considerable discomfort. This woman's body swelled, probably on account of flatus, but she could have borne that amount of flatus if she had not had a big spleen. At the same time her legs swelled. Now, this swelling of her legs was due to a certain amount of fluid in the cellular tissue; and that was the result—not of any mechanical effect of her spleen-disease, such as may result from a diseased liver or a diseased heart—but of her *anæmia*, which, especially when conjoined with a certain amount of emaciation, will give rise to some degree of swelling of the legs. The watery serosity more readily than healthy serosity escapes from the capillaries; and, when a person is emaciated, the vessels are less well supported. In old books, the symptoms of diseases of other organs are often confounded with the symptoms of spleen-disease. For example, derangement of the circulation in consequence of diseased liver has often been supposed to be due to spleen-disease. It was noted in the account that the respirations were frequent. Now, spleen-disease has no tendency to alter the respiration, unless it be by interfering with the descent of the diaphragm by its large size, and so making the patient breathe more frequently. The apparent variations in size were probably due to variation in the distended colon. The colon does not lie in front of the spleen, it does in front of the kidney; but when the spleen is considerably enlarged, its lower part may be, as it was in this woman, overlapped by the distended colon. The woman had cough which continued to increase. Now, cough is no symptom of spleen-disease, nor is rapid emaciation such as is noted in this case. Remember that, in the time she was in the hospital, no marked emaciation would occur from simple spleen-disease. The fluctuation that was felt was probably *aërial fluctuation*, and not the fluctuation of fluid.

When this woman came into the hospital the first question was, What was the tumour that we felt? We had no doubt that it was the spleen, for the reasons which I have given you: first, its situation; secondly, the character of its edge; thirdly, its mobility. We felt the posterior edge as well as the anterior; and, if we required further evidence, it was exceedingly superficial, nothing lay between it and the margin of the thorax.

The second question was, Were the symptoms due to splenic enlargement? This was a point of great importance in prognosis and in treatment. No, they were not due to it. At any rate, when I saw the woman, no one could entertain the slightest doubt that they were due to something else. In the first place, the spleen was perfectly indolent. There was no pain or tenderness. Now, had this been an acute enlargement, or splenitis, to lead to fever, there would have been tenderness. In all cases in which the spleen is actually enlarged from febrile disturbance, when there may be a form of inflammation, there is tenderness. In typhoid fever, in scarlet fever, in measles, there is a certain amount of tenderness. Even when the patients are semi-comatose, they often shrink when you touch it. Secondly, febrile disturbance was present. Now febrile disturbance is not a consequence of spleen-disease. In some febrile diseases, as I have told you, the spleen is enlarged, but it is moderately, compared to this case; never attaining the size it had in this case; and, again, the fever in such cases precedes the splenic enlargement; in this case, the febrile disturbance was very considerable, but was in no relation to the enlargement of her spleen. We had evidence that the condition of her spleen had existed for two years, and we know that chronic enlargements of the spleen do not have, as consequence, fever of such degree as was here present, and so we knew that her illness must be due to something else than her spleen-disease. To exclude leukaemia the blood was examined and no excess of white corpuscles was found.

I am not going to discuss the case at any length, but I may briefly say that we supposed that an acute deposit of tubercle was going on, because of the duration of the disease, and the absence of any of the acute specific diseases, the absence of pyæmia, the absence of any other affections, together with the constant elevation of all temperature, varying from day to day and at different parts of the day; and this led us to the conclusion that it was an acute deposit of tubercle, affecting especially, we

thought, her lungs, because of her increasing cough and because she had a certain amount of physical signs.

And now I will read you an account of the *post mortem* examination thirty hours after death. The diaphragm was greatly arched; the spleen more under the chest-walls than it was felt to be during life; the lower end covered by the transverse arch of the colon, which is distended with flatus; the costo-colic ligament was very broad. The liver lay very obliquely, so that the left lobe extended very little beyond the middle line; the body felt in the right lumbar region was part of the right lobe of the liver itself, lying vertically, and extending much below and in front of the kidney, so that it would not have been possible to feel the latter; the intestines and peritoneum were redder than natural. Both lungs were studied throughout with grey granulations; there were evidences of recent pneumonia, and much muco-purulent matter in the bronchial tubes. The kidneys were healthy. The spleen weighed 17 ozs.; it was 8½ ins. in length, and 4½ ins. in breadth; the trabeculae were more visible than they should be; the Malpighian bodies less so; the tissue generally was much firmer and tougher than natural. The liver was not enlarged, but its cut surface was granular, the margin of the granules being very vascular, the granules pale and soft. The spleen lay high under the ribs, for the diaphragm was greatly arched after death, because the patient died at the termination of an expiration. This is a point not always sufficiently thought of in considering the *post mortem* position of organs. The patient dies at the termination of the deepest expiration he ever made in his life, and the diaphragm is greatly arched in consequence, and the organs lie higher up under the ribs than they were felt to do during life. There was scarcely any fluid in the abdominal cavity. I mentioned to you the possibility of a certain amount of fluctuation being caused by a distended colon containing fluid. The condition of her lungs was sufficient to enable us to say what was the cause of death. The spleen presented the characters that we commonly find in those which have been the subject of chronic congestion and of the changes consequent on congestion. It is possible, very possible, that her living in the neighbourhood of a marsh may have had something to do with the spleen disease. The white patch on the anterior margin of the spleen was at the spot where it had rubbed up and down during respiration. We felt it to do so, and as it pressed against the chest it led to thickening of the capsule. The microscopic characters were just those of a spleen that had been long congested, containing a large number of fibro-plastic corpuscles in the process of development into tissue. It was as if the cellular tissue of the organ were becoming much increased in quantity.

Those are the principal points in connection with this case. I should mention to you the case of the boy who was lately in the hospital, and who died of pericarditis. We found that his spleen contained a considerable excess of blood. It was much enlarged, but never descended below the margin of the thorax. But, in addition to the congestion, which was probably due to the state of her heart, we found two spots on the spleen, of which I should like to read you an account.

"There were two crimson spots at the surface of the spleen. One was about an eighth of an inch in breadth, and a quarter of an inch in depth, extending into the substance of the spleen, the broadest part being at the surface. The other was somewhat larger, somewhat paler; and the tissue around was very dark. They were both wedge-shaped, both almost structureless and granular. The one looked like a recent clot of blood of that peculiar form; and the other was a little puckered at the surface, and the tissue around rather congested."

Now, these spots were the result of the circulation in the blood of minute particles of fibrine; in fact, they were due to embolism, and to coagulation of blood around the particle of fibrine, which was exceedingly small; and, being arrested here, blood accumulated in the vessels around, and was extravasated. These spots are not uncommon in the disease from which this boy suffered—acute rheumatism, with endocarditis; and in these plates you will see representations of the same thing in the kidney. Particles of fibrine are carried from the valves of the heart, are arrested in the capillary circulation of the liver or kidney, and so give rise to these wedge-shaped fibrinous-looking masses. Rayer termed the condition "rheumatic nephritis". We might just as well term the condition in the spleen "rheumatic splenitis". Rokitsky has termed it "capillary phlebitis"; but now there is no question that these wedged-shaped masses are due to embolism.

I should have mentioned to you that, in cases of acute tuberculosis, the spleen is enlarged; and in children it is often at the same time the seat of a deposit of tubercle, but in the adult it is the exception to find tubercle in the spleen. You know that the organs are most prone to deposit of tubercle which are in a state of active work; and you know in what an active condition in the child are the spleen, lymphatic glands, and Peyer's patches, all of which are then especially liable to deposit of tubercle in early life.

Cancer of the spleen is exceedingly rare; you would think first of

everything else. But it is the seat, now and then, of a deposit of cancer, which assumes usually the nodular form; but it is very rare, and I have never seen it, except in conjunction with deposits in other organs. There was a woman in the hospital lately whom I suppose to have cancer of the spleen. You all saw her. She lay in my female ward; her name was Beaumont, her age 49. She had scirrhus cancer of the right breast, and a cancerous mass in the anterior wall of her rectum. Her liver was rather large and hard, perhaps infiltrated with cancer. She was sallow, and offered a good specimen of the appearance of the subjects of cancerous cachexia. In this woman, a large tumour occupied the left hypochondrium, and passed up under the ribs. It was hard, with a sharp edge, which met the margin of the thorax at a right angle. It was plainly the spleen. Its dulness extended up to the level of the nipple, and the lower edge was on a level with the umbilicus. It was situated just beneath the parietes, moved up and down with the movements of respiration, and could be pushed a little from side to side by the hands behind and in front of it. Its surface was irregular, and, in the anterior border, several distinct nodules could be felt. It was not tender. The woman left the hospital, and, after a few weeks, died in the country.

ON THE REMOVAL OF HÆMORRHOIDS BY PAINLESS OPERATIONS.*

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THE division of hæmorrhoids or piles into "external" and "internal" is arbitrary, though useful for purposes of description. It must not be supposed that there is any marked line of demarcation between the two, or any peculiarity of structure, except that, in the former, a part of the swelling is covered by the external integument—a structure that is highly sensitive.

The removal of hæmorrhoidal swellings, whether by the ligature or the knife, has till lately been always attended by severe pain; while, contrary to the opinion once entertained by the profession, serious after-consequences occasionally ensue. Cases of phlebitis—of deep-seated pelvic suppurations—have occurred in my own practice, and, although rare and manageable, have always been the cause of anxiety. The immediate danger, against which surgeons endeavour to guard at the time of operation, is hæmorrhage. Now, in dealing with a strictly external pile, the removal may be at once effected painlessly and safely by first freezing the part with ether-spray, and next by cutting it away with the scissors. Should there ensue any hæmorrhage, the open end of the vessel can be readily secured either by a needle or by a ligature.

Piles which are strictly internal, and offer no narrow basis or peduncle, may be safely treated by strong nitric acid. The patient, being on his hands and knees, strains so as to cause a protrusion of the affected part. The enlarged veins are next touched carefully with nitric acid, and the part is returned; an opiate suppository being finally introduced. By such means, the whole mass is often destroyed after one operation, and the patient experiences no further trouble, the vessels becoming consolidated.

The more important question is, How are we to deal with those hæmorrhoidal swellings, partly internal, and partly external, which consist of large venous trunks, which it would be dangerous to divide without precautions, and which could not be well removed by acid or by cautery? The clamp and hot iron of Mr. Henry Smith effect the removal of these swellings on very safe and easy terms. The operation is too well known to need notice from me here, beyond that of approval. I perform the following operation in some cases. The hæmorrhoidal mass having been protruded beyond the sphincter ani, I seize it with a pair of double hooked forceps, and freeze it with ether-spray. Next, I pass a long pin through its base, and apply ligature-silk in a figure of eight, so as to press the veins enough to arrest hæmorrhage, but not to cause strangulation (the latter being always the most painful part of the process). The frozen veins are then sliced off near to the line where the needle is inserted. The patient is scarcely conscious of any surgical operation, if these steps are performed well and quickly. In the course of a few hours, all fear of hæmorrhage has passed away, when the needle can be withdrawn, and the silk taken off.

Should it be necessary, the base or pedicle of the swelling may be charred with the gas-cautery. It will be remembered, that the crystals of ether are inflammable; and the surgeon must be prepared for such an emergency as that of igniting them, should the gas-cautery be used.

* Abstract of a Clinical Lecture delivered at St. Bartholomew's Hospital.