CLINICAL LECTURES

ON THE DIAGNOSIS OF

EXTRAPELVIC TUMOURS OF THE ABDOMEN.

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(Reported by W. RICHARDSON GOWER, ESQ.)

LECTURE IV.

Enlargements of the Liver.—Case of T. H.

GENTLEMEN,—I considered at the last Lecture tumours of the abdomen formed by the enlarged spleen. I do not mean that I finished the subject, for I intend, from time to time, to bring under your notice other cases of splenic disease causing tumour in the abdomen.

To-day I shall briefly consider the subject of liver-tumours. I mean by that, tumours of the abdomen dependent on enlargement of the liver. First, I wish to recall to your mind the anatomical relations of the liver to the diaphragm, to the pleura, to the lungs, and to the pericardium. For practical purposes, you are not likely to forget its relation to the lungs and pleura, but I am quite sure that you are likely to overlook its relation to the heart and pericardium, for I did so myself till experience taught me to remember it. Remember the close relation in position of the liver to the stomach. The importance of remembering this is illustrated by the case I shall relate to you presently. Recollect also the relation of the liver to the kidney, to the supra-renal capsule, to the colon, and of the left lobe of the liver to the spleen.

Displacement of the spleen, sufficient to cause tumour in the abdomen, I told you was, to say the least, infrequent; displacements of the liver, sufficient to cause tumour in the abdomen, is common; displacement of the liver downwards is very frequently caused by effusion into the pleura; very frequently by dilated heart; frequently by emphysema of the lung; less frequently by effusion into the pericardium; and rarely by new formation between the liver and the diaphragm or in the lung itself.

Great dilatation of the right side of the heart always causes some displacement of the liver, and often displacement sufficient to cause true abdominal tumour. Displacement of the liver never causes ascites or jaundice. You know that the liver is displaced especially by noticing the rounded upper surface; you see, passing across the abdomen, just below the margin of the thorax and below the ensiform cartilage, something that is rounded, and then find by percussion that it is the upper surface of the liver. Fluid in the right pleura, sufficient in quantity to displace the liver downwards, is accompanied by such loss of power or paralysis of the same side of the diaphragm that when the patient breathes there is little or no ascent or descent of the liver. In these cases, also, the other evidences of effusion into the pleura are present. When a dilated heart depresses the liver, the pulsation of the right ventricle is felt below the ensiform cartilage, and you see, unless the patient be very fat, the rounded upper border of the left, and of a small portion of the right lobe of the liver. In such a case the liver may move up and down in respiration. Emphysema of the lung is a common cause of a certain amount of displacement of the liver; but, in this case, percussion enables you to determine the cause.

The upper rounded surface of the depressed liver is well seen in a man now in my wards in the Hospital, and to whose case I shall presently refer. As I attach importance to your appreciating by sight, during life, this upper rounded surface of the liver, I have frequently pointed it out to you in this man. So much for the relation of the liver to the diaphragm, to the pleura, to the pericardium, to the lung and to the heart.

The relation in position between the liver and the stomach is also very important. Disease may extend from the liver to the stomach, and so give rise to some peculiar symptoms. A man in the hospital lately, to whose case I shall presently refer, had cancer of the liver; the disease, as we shall see, extended to the stomach. Cancer of the stomach may spread to the liver, though the converse is more frequent, *i.e.*, cancer more often passes by extension from the liver to the stomach than from the stomach to the liver. Abscess of the liver may burst into

the stomach; hydatid tumours of the liver may burst into the stomach; chronic ulcers of the stomach may eat into the liver. Then remember the relation in position of the liver to the colon. The colon sometimes lies in front of the liver, and renders a diagnosis difficult which would otherwise be easy. You may think there is a tumour originating below the liver, when really it is the liver itself, if you forget that the colon sometimes passes in front over the right lobe. Again, the colon or the dilated stomach may yield resonance enough to cause the enlargement of the liver to be overlooked. Certain common abnormalities of form of the liver should be borne in mind when attempting to make a diagnosis of abdominal tumours. Now and then the left lobe of the liver is very small, and the right lobe lies very low, the organ being perfectly healthy. You may make a great mistake if you do not remember this; you may examine a patient complaining of some dyspeptic symptoms, and mistake this right lobe for an enlargement, and conclude that he has a diseased liver. Again, variations in the position of the liver in different persons should be borne in mind. In some persons it lies very vertically, especially in persons with a small thorax, and in women who lace tightly. On the other hand, in some persons with a large thorax, and in some persons with incipient emphysema of the lung, a small portion only of the liver may be felt, because, the diaphragm lying horizontally, the liver lies horizontally also. I saw, only a few days ago, a case which illustrates these remarks. There was abdominal tumour, and the question was what was its origin. The patient was a lady and had therefore worn stays. Her liver had been compressed and lay vertically. The margin of the thorax had pressed upon the liver and had caused, about an inch above its margin, a thickening of the capsule, and a diminution in the thickness of the liver at the spot. Subsequently the lady had become the subject of cancer of the liver, which had led to considerable enlargement, and the organ extended downwards to the crest of the ilium. The transverse linear depression had been carried downwards as the organ increased in size. In passing the hand upwards over the enlarged liver one came to the transverse linear depression I have just described, and the first idea which arose in the mind was, that there was a tumour totally unconnected with the liver, the part below the depression being taken for a tumour unconnected with the liver, and considerable doubt had been expressed concerning the nature of the ailment. You will remember this transverse linear depression on the liver, the result of compression, and the consequent apparent separation of the lower part of the right lobe.

Now and then the liver lies very much to the right. It did so in the woman on whose case I lectured last Monday. It appeared to have been pushed there by the distended colon, the distended stomach, and the large spleen. The consequence was, that the right lobe could be felt as far as the crest of the ilium; and as it was thin, overlapped and lay in contact with the right kidney, it was mistaken for a renal tumour. I have told you already how we knew that it was not; *viz.*, by the sharp edge and the nearness to the lateral abdominal parietes, and its ascent and descent with the rise and fall of the diaphragm in respiration.

Having determined that a given tumour is hepatic, we desire to know the disease causing the enlargement. Chronic impediment to the systemic venous circulation causes anasarca. An impediment to the passage of blood through the heart or lungs has general anasarca as a mechanical consequence. Now the liver has no direct relation to the systemic circulation; no blood from the lower extremities, no blood from the kidneys, passes through the liver. But the blood from the lower extremities, and from the kidneys, passes through the vena cava, which lies in the notch at the back of the liver: that is its only mechanical relation to the systemic venous circulation. But, as a matter of fact, oedema of the lower extremities, of all the parts which empty their blood into the inferior vena cava, does occur in certain cases of disease of the liver. How is it induced in these cases? Liver disease produces oedema of the lower half of the body in two ways. First, causing great distension of the belly, either directly by its size, or indirectly by the ascites it induces. Great distension of the belly, whatever its cause, is necessarily accompanied by compression of the anterior wall of the vena cava, as it lies on the posterior surface of the abdomen, and thus a certain amount of impediment to the passage of the blood through the vessel is produced. Whatever force pushes forward the anterior wall of the abdomen, will to some extent compress everything lying on the inner surface of the posterior wall. The liver never compresses the vena cava simply by its weight. It is the distension of the belly by the liver itself, or by the great disturbance of digestion, and consequent flatus in the intestines; or, more commonly still, by fluid in the peritoneum, which is accompanied by compression of the vena cava. Very fat people with large abdomens, often have oedema of the lower extremities from this cause.

Secondly, hepatic disease may induce oedema of the lower half of the body by directly narrowing the vena cava in the notch at the posterior

part of the organ. For example, cancerous growths in the liver are occasionally developed in such a situation that they push the anterior wall of the vena cava back into the vessel, and so narrow its calibre. In cirrhosis of the liver, too, it is not uncommon to find one or more nodules projecting back into the vena cava. In such a case, if after death the finger be passed up the vena cava where it lies in the notch behind the liver, these projections into the vessel may be felt. It is in these ways that the vena cava is compressed, and its channel narrowed. The mere weight of the liver, as you will see, if you think of it for a moment, can have no physical effect in compressing the vena cava, which is placed in a notch in the posterior part of the organ.

It is important to remember that this narrowing of the vena cava produces an effect, not only on the veins of the lower extremities, but also on all the parts from which the blood is returned to the inferior vena cava. Thus an impediment to the flow of blood through the vena cava is necessarily an impediment to the return of blood from the kidneys, and hence you see a mechanical cause for the relation between hepatic and some other abdominal tumours (pregnancy) and albuminuria, a cause which is superadded to, and enhances the effect of, any constitutional condition which may affect alike both organs. Remember always, in estimating the occurrence of anasarca, or oedema of the lower extremities, the relation between renal disease and any other cause of dropsy. A patient, that is to say, having Bright's disease, in its nature tending to produce anasarca, though in extent too trifling to give rise to it, if he have any disease superadded calculated also to produce anasarca, then the two shall produce such a degree of anasarca as either one alone would be totally inefficient to produce. Let a man with an impediment to the return of blood through the vena cava, insufficient to cause oedema of the lower extremities, become the subject of a renal disease also insufficient to produce anasarca, and the two conjoined shall produce considerable effusion of serosity into the cellular tissue of the lower half of the body. A man has hepatic disease impeding, in a very trifling degree, the flow of blood through the liver; no effusion into the cavity of the peritoneum is produced; he becomes the subject of Bright's disease, and ascites is the result of the two diseases, which neither would have alone produced it. So remember what I would call the intensifying character of Bright's disease in the production of local oedemas.

Now, what is the influence of hepatic disease on the portal circulation in producing symptoms? Remember that the hæmorrhoidal veins, the intestinal veins, the veins from the stomach, from the spleen, from the peritoneum, all empty their blood into the portal vein, and that the blood of the portal vein passes through the liver; consequently, any and all of the diseases of the liver which interfere with the flow of blood through the liver have, as consequences, disturbance of the digestive organs, congestions—that is to say, of those parts; and, in a very large number of cases, one or more of the following symptoms: Hæmorrhoids, with or without a flow of blood from them. When a patient consults you for hæmorrhoids, don't forget for a moment their relation to hepatic disease: you may kill the patient if you do not remember it. Diarrhoea is another symptom of impediment to the flow of blood through the liver. A patient may owe his health, or even his life, to his repeated attacks of diarrhoea. He has hæmorrhoids because the blood from his rectum has to pass through his liver. Congestion of his portal vein follows, and the hæmorrhoidal veins pour out a quantity of blood and relieve it, just as a man having congestion of the brain and meninges suffers an epistaxis, which relieves him. Again, a man has congestion of the radicles of his portal vein, and has a diarrhoea which wards off the bad effects of the hepatic disease, relieves the overfilled portal radicles. Tie his hæmorrhoidal veins, stop his hæmorrhoidal flux, and he becomes the subject of all the ill-effects of congestion of the portal vein. Stop his diarrhoea, and he has ascites, perhaps hæmatemesis. We see instances of these every day, I was going to say. Certainly I never pass a week without applying a knowledge of these simple facts to practice. Then hæmatemesis is another symptom. In rarer cases the impediment to the flow through the liver, leading to overloading of the veins of the stomach with blood, a great escape takes place—a capillary hæmorrhage, commonly to the great relief of the patient, though it may be, if excessive, to his death. Again, enlargement of the spleen results from diseases of the liver which impede the passage of blood through the portal vein. All the splenic blood has to go through the liver, and any impediment to the flow through the liver leads to congestion of the spleen. Again, ascites occurs from the overflowing of the radicles of the portal vein, which receive the blood from the peritoneum. Effusion of serum takes place from the overfilled capillaries; and serosity in the peritoneum is ascites.

Now, it is important to bear in mind that the occurrence of any one of these hæmorrhages or effusions may prevent the production of the others by relieving the congestion, which is the common cause of all. The diarrhoea may keep the patient free from hæmorrhoids, free from ascites,

free from hæmatemesis, free from enlargement of the spleen. His portal vein is effectually relieved by the escape of fluid from the intestinal mucous membrane—that is, from the intestinal radicles of the portal vein.

There is one point in the anatomy of these parts to which I perhaps ought to have referred before. You will remember that there are a great number of anastomoses between the portal vein itself and the superior vena cava; and in some persons these are so free that they escape all mechanically-produced troubles resulting from impediment to the flow of blood through the liver. In the vast majority of persons, however, these anastomoses are totally inefficient for the establishment of a collateral circulation. They can afford only an infinitesimally slight relief to the overdistended portal vein. So much, then, for the relation between the systemic circulation, the portal circulation, and certain diseases of the liver; *i.e.*, diseases of the liver which impede the flow of blood through the portal vein; *i.e.*, the trunk or its terminal twigs.

I told you that in determining the nature of the disease of the liver which produces a tumour, we kept in view the influence of the disease on the circulation through the liver, and on the secretion from the liver. We have considered the former—*i.e.*, evidences of interference with the flow of blood through the liver, and now come to the latter—the secretion from the liver.

Bile is said by some persons to be first formed in the blood, but this point does not practically matter to us. The question is still too much *sub judice* for us to draw any practical conclusions from it. It is enough for us to know that any mechanical impediment to the escape of bile from the liver causes jaundice; leads to the presence of bile in quantity in the blood; that jaundice may occur without such mechanical impediments; and that whatever the cause of this accumulation of bile in the blood, certain nervous phenomena may follow. I say this because it has been supposed that it is only one disease that leads to the peculiar nervous phenomena—namely, what has been called acute yellow atrophy of the liver. There is no doubt that these phenomena, delirium, etc., may occur, whatever the cause of jaundice, and whether it be acute or chronic. Now, nervous phenomena in jaundice are due to one of two causes—viz., 1, to blood-poisoning, *i.e.*, the presence in the blood of bile, or of some of its elements, or of some of the products of its decomposition; and, 2, to inflammation of the membranes of the brain which occur in a certain proportion of fatal cases of jaundice. It is the meningitis of the convex surface of the brain which suffers in those cases. I have described to you some of the consequences of impediment to the flow of blood through the liver, and impediment to the escape of bile from the liver—as only some of the diseases of the liver have the effect of damming back the blood in the portal veins, or of interfering with the escape of bile; we may practically divide hepatic diseases which cause tumour into two great classes—those which produce ascites and jaundice, and those which do not. Those conditions which produce ascites must impede the flow of blood through the liver; and those which impede the flow of blood may also impede mechanically the escape of bile from the liver. There are, however, a certain set of cases which do produce jaundice, without impeding the flow of blood through the liver. These are the two great groups; so that, when you come to the bedside of the patient, and feel a big liver—*i.e.*, a tumour which you conclude, from its physical condition, to be the liver—the first questions you answer are, Has the patient any fluid in the cavity of his belly? has he any jaundice? has he ever had jaundice? Then you inquire about diarrhoea, hæmorrhoids, hæmatemesis, oedema of the lower extremities, and enlargement of the spleen; but, at the bedside, first determine the presence or absence of ascites and of jaundice. I think that the examination which a practical man would make would be something like this. He would ask, "How long have you been ill?" and then, passing the hand over the abdomen, and feeling a big liver, he would percuss the upper border, notice the position and character of the lower border and the consistence of the liver; and then look at the patient, and see if he has jaundice, and examine him to ascertain if he has ascites; and then proceed to the other symptoms.

And now to apply what I have said to the cases before us. The first is a case of a common disease—viz., cancer of the liver.

Thomas H., aged 35, shoemaker, was admitted June 5th, 1868. The only point worthy of note in the patient's family history is, that his mother died at about forty-five, of an "internal hæmorrhage", after bringing up blood for three days. Till lately, the patient had always enjoyed good health. His habits have been temperate. During the last few years, he has lived poorly, and worked in a close crowded workshop. There is no history of syphilis. He is married, and has two healthy children. During the last eight or nine years, he has suffered slightly from hæmorrhoids. He dates the commencement of his present illness four months ago, when, after a rather heavy meal, he experienced great fulness and discomfort at his stomach (epigastric re-

gion). He became thinner, and felt weaker, and was sent by some friends to Eastbourne. While there, a fortnight before admission, he noticed that his skin was becoming yellow; and, about the same time, he began to bring up his food from one to three hours after taking it, and he has since continued to do so occasionally. A day or two after the commencement of the sickness, he brought up a quantity of matter "like coffee-grounds". From the time the jaundice was first noted, it never disappeared or diminished in degree.

Present State.—The patient is much emaciated, his face equally with his trunk. There is an universal lemon-yellow tint of skin and of the conjunctivæ. The face is slightly dusky. He lies easily in any position, and complains of no pain. The abdomen is not prominent; the sides very slightly bulging; the extreme flanks dull. Imperfect fluctuation is detectable. The umbilicus is slightly tender, reddened, and indurated, the hardness extending round it about two-thirds of an inch. This condition of the umbilicus did not cause any discomfort; the patient did not know of its existence. The liver-dulness commences in the nipple-line at the sixth rib, four fingers' breadth below the nipple. The margin can be felt about three fingers' breadth below the margin of the thorax, not sharp; but both the margin and the upper surface feel extremely hard. There is general fulness and hardness at the epigastrium. To the left of the ensiform cartilage, a hard prominent nodule, of about the size of a marble, can be felt on the liver. No tumour can be detected elsewhere in the abdomen; but just above Poupart's ligament, in the right groin, is a hard round gland, of the size of a small cob-nut. The urine exhibits abundant evidence of bile.

June 6th. This morning, the patient brought up about half a pint of thick "coffee-ground" matter.

June 15th. Since last report, the patient's condition has not altered. Occasionally he vomits his food, and once or twice small quantities of the coffee-ground matter. The vomiting is preceded by nausea, but not accompanied by retching. He is taking a mixture of nitro-muriatic acid and spirits of chloroform, which, he thinks, is doing him good.

June 26th. The nodules of the liver are larger than they were. A slight depression can be felt in the one at the epigastrium. The fluid in the abdomen is increased. There is no oedema of the lower extremities. Emaciation is extreme; colour unchanged. He complains of a burning pain at the epigastrium.

June 28th. Since last report, the patient has been gradually sinking, vomiting occasionally, but not constantly; and he died this morning, at 10 A.M.

From the date of admission till the day of death, the temperature ranged from 98 to 98.6 deg. The pulse never exceeded 64 till a few days before death. The respirations were 14 to 18.

Post Mortem Examination, thirty hours after death.—The surface of the body appears more intensely yellow than during life. All the tissues of the body are also stained yellow. The left lung is somewhat oedematous. On the surface of both lungs are numerous greyish-white patches, in size from a pin's head to a split pea, solid, with deep red margins. At the base of the right lung is a circumscribed patch, probably malignant. The liver projects less downwards than it was felt during life. The surface is covered with nodules, evidently malignant, from the size of a pin's head to that of a nut. The prominence which could be felt at the epigastrium is now seen to consist of several nodular masses. The upper border of the liver is adherent to the diaphragm, and the adhesions are infiltrated with cancerous matter. The weight of the liver is sixty-one ounces, measuring ten inches by seven. The right lobe is small. The little nodules on the margin have depressions in their centres. The substance of the liver is dark green, and is studded throughout with cancerous nodules. The induration about the umbilicus is due to malignant disease. The peritoneum is infiltrated with nodules of cancer, especially near the liver, and in the omentum, which is adherent to the parietes. The stomach is small; its coats are thickened. At the pyloric end, the wall is infiltrated with cancerous matter, and ulcerated. The diseased part is two inches and a half in extent, but does not reach to the pylorus itself, which is quite healthy. The vermiform appendix is solid, from infiltration with cancerous matter. Between the rectum and the base of the bladder, about five inches from the anus, is a hard mass, of the size of a Maltese orange, involving the walls of both viscera, but encroaching to only a slight extent on the cavity of either. The posterior peritoneal surface of the bladder is studded with cancerous nodules. The kidneys are healthy, but yellow. The brain is healthy; the white matter scarcely, if at all, stained.

This man was of an age (35) when cancer of the liver is by no means uncommon. Although there is no distinct family history of the disease, it is very possible, from the mother's symptoms, that she had cancer of the stomach. Though his symptoms had not lasted very long, you must remember that patients always date their illness in these chronic

cases much later than it really commenced. This man dated his illness from the first discomfort he experienced, but probably the disease had been present for months before. The jaundice in this case was permanent. It is so in all cases of cancer of the liver. Once established, it never goes away; for it results from compression of some of the hepatic ducts, or of the cystic duct, by the growth of a tumour; and the growth usually increases. The coffee-ground vomiting, you know, is a sign of hæmatemesis. The blood, oozing from a large number of capillaries, is acted on by the gastric juice as it does so, and is converted into that black matter. Only do not confound bilious vomiting, dark green bile, with "coffee-ground" black matter. Sometimes, even when you see it, you will have a difficulty in determining which it is. Sometimes you may use chemical reagents which may assist you. And one other point is useful: if you dilute the bile, however dark it is, you commonly bring out the greenish colour; while altered blood will still retain its black tint. It is noted that the patient suffered no pain. Cancer of the liver is one form of cancer that is unaccompanied by pain, unless the peritoneum becomes involved, as it usually does towards the end of the case, and then the pain may be severe.

The condition of the umbilicus is a point to which I would direct your especial attention. I have noticed, in several cases of cancer of the liver, that one of the earliest indications of the exact nature of the disease was obtained from an examination of the umbilicus. This is a fact of great practical importance; and, when you have a case which you suspect to be hepatic cancer, or about which you are doubtful, you had better examine the umbilicus, for there you may get the key to the whole mystery.

In this case, the liver lay rather low for cancer, in which the dulness usually extends considerably upwards. The cause of this, I believe, is the adhesion of the liver to the diaphragm, and the paralysis of the latter in consequence of the growth into it of cancerous nodules. Whenever you feel on the surface of the liver distinct nodules, as we did in this case, you may be quite sure that you have to do with either cancer of the liver, cirrhosis of the liver of an unusual form, syphilitic disease of the liver, or hydatid disease of the liver. Hydatids of the liver, I think, you might have excluded in this case. When more than one hydatid nodule is to be felt, one or more would certainly form large rounded tumours. If the nodules that were perceptible to touch were larger than a pea, I think you may come positively to the conclusion that the disease was not cirrhosis; that it was either cancer or syphilitic disease. But then syphilitic diseases of the liver in the adult are infinitely rarely, all but never, attended with peritonitis, with jaundice, or with ascites, conditions common in cancer. But a growth in the liver increasing with the rapidity with which, as the subsequent notes show, this growth did, could be nothing but cancer. But let me caution you about a fallacy. The patient was growing thinner, and in such a case it might be that the liver was more easily felt. Here there was no doubt, however, of the actual increase in size. Again, a depression felt on the centre of a nodule on the liver, such as was felt in this case, is absolutely diagnostic of cancer. The anasarca which occurred towards the end of the man's life, was probably in part due to the fluid in the abdomen; in part, to the narrowing of the vena cava; in part, to changes in the blood, rendering it more watery; in part, to the emaciation. There was a condition of blood favourable to its escape from the vessels, a considerable amount of emaciation, and therefore less support of the capillaries, conditions which might alone lead to a small amount of oedema; and if there be a slight compression of the vena cava, would be sufficient to determine a decided amount of effusion of serosity with the cellular tissue. At the *post mortem* examination, we found the liver lie higher than it was felt during life, just as we found the spleen in the case which I mentioned to you last week. The patient dies at the end of an expiration, the diaphragm accordingly is greatly arched, and the organs in contact with the diaphragm lie high up under the margin of the thorax. There was a considerable cancerous growth in the wall of the stomach, which might alone have given rise to the hæmatemesis. There were no symptoms during life of pyloric constriction, and after death we found the pylorus free from disease. Now when cancer occurs in the stomach primarily, beginning as a separate centre, it occurs, as a rule, at the pylorus, or at the fundus, or at the cardiac orifice. In this man, it was not at the pylorus, and it had doubtless passed by extension from the liver. Some inflammation had occurred over a cancerous mass in the liver; adhesion had formed between it and the stomach, and the coats of the latter were infiltrated with cancer.

Cancer of the liver, I may say, producing abdominal tumour, occurs under two forms—infiltrating cancer, of which we have a specimen in this preparation, and cancerous nodules. Now and then cancer nodules in the liver are so small as to give rise to no symptoms. In the infiltrated form, there is less tendency to inflammation of the peritoneum

than in the others, in which there is great tenderness, and often friction to be heard. You may find in the liver scirrhus, encephaloid, and colloid cancer. Colloid is rare; perfect specimens of scirrhus, and perfect specimens of encephaloid are rare. The usual form is what has been called a scirrho-encephaloid, not very soft and not very hard. The occurrence of colloid cancer in the liver has been doubted. We have an excellent specimen in University College Museum. The diagnosis in this case rested—1. On the size of the liver; the nodules on its surface to be felt during life; the increase in the size of the nodules while the patient was under observation; the depression on the surface of one of the nodules. 2. On the cancerous condition of the umbilicus. 3. On the gland in the groin.

As mechanical consequences of the cancer, there were—1. Ascites; 2. Jaundice. As points bearing on the diagnosis—Tenderness of the surface of the liver; hæmatemesis.

You see from this case how large an amount of cancer may be rapidly formed without any elevation of temperature, without any increased frequency of pulse. There is another case in the hospital to which I wish to direct your attention, but it is too long to go into to-day. I may say, however, that the man's primary disease is a dilated heart—primary, that is to say, in relation to his liver. The dilated heart has depressed the liver, and rendered visible through the wall of the abdomen the rounded upper surface, which, when seen, is so characteristic of depression downwards of the liver. He has, in addition, a certain amount of enlargement of his liver, from congestion, to which I shall have to refer on another occasion.

HOSPITAL ADMINISTRATION.

By HENRY W. RUMSEY, M.D.T.C.D., Cheltenham.

THE following are observations upon the questions propounded by Mr. Ernest Hart for discussion at the Metropolitan Counties Branch of the British Medical Association. [See page 221.]

The whole question of hospital administration involves difficulties and complications which are more of a social, than of a medical or scientific, nature, and are to be settled rather by recurring to sound principles of political economy, than by considerations of professional interest or medical ethics. Yet both the successful treatment of the sick poor, and the advancement of medical science, would be most largely promoted by such amendments of the present system as would limit the benefit of purely charitable institutions to those who are *real* objects of charity, and whose cases are of the most serious and urgent nature.

I.—The "abuse" of medical charities is at least *fivefold*.

1. They are employed largely for the relief of persons who, under judicious regulations, might be enabled to provide for themselves—lodging, board, and nursing (as in-patients)—medicines (in all cases)—and, to some extent, even medical advice and surgical aid.

2. In England, they are too often substitutes—very imperfect and very expensive substitutes—for a comprehensive *national* provision for the medical relief of the poor.

3. They are very commonly prostituted for the selfish objects and the private convenience of those who contribute to their support.

4. They are subjects of financial mismanagement and consequent embarrassment.

5. Their distribution, their sites, and their construction are frequently open to serious objections, and tend to defeat the professed objects of their establishment.

I might add, among other minor abuses, that *special* hospitals and dispensaries are not unfrequently made the instruments of promoting private interests and personal advancement. But this abuse would probably wither, if the preceding chief abuses of hospital administration were uprooted. The first step towards any reform of this department would be a full, free, thorough, and impartial inquiry, followed by a complete report. This, in my opinion, could be ensured only by national or governmental agency.

Medical charities, like other charities, may be, and often are, administered so as to inflict serious mischief upon society. They must, therefore, be brought under public inspection. I do not believe that the best means of curing their abuses can be discovered, still less settled in detail, until after a comprehensive inquiry. Premature interference with the existing system, and changes based on imperfect information, would probably do more harm than good.

The relations of dispensaries and the *out-patient* department of hospitals to *out-door* medical relief under the Poor-law, are at present most unsatisfactory, and require thorough investigation. That something like

consolidation of these sources of relief, or at least the mutual adjustment of voluntary and compulsory efforts for the better attainment of their respective objects, would be the result of such inquiry, I can hardly doubt. The Irish dispensary system, with certain modifications and improvements, suggests a *modus operandi*. Any real necessity for the *out-patient* department of hospitals and infirmaries is very problematical. It is more open to abuse and objection than any other feature of the hospital system. I believe that it might be advantageously limited absolutely to two classes of sick or hurt applicants—those who may be waiting for admission as in-patients until beds are vacant, and those (a larger class) who may be transferred from the intern to the extern department, for the purpose of continued care and surveillance, until finally discharged.

II.—No steps, in my opinion, ought to be taken to abolish privilege until well-organised efforts have been made on a large scale, and under legal protection, to supply an obvious and admitted necessity—I mean the necessity for institutions for the reception of working people, not the poorest, who may require "in-door" treatment for sickness or injury. Servants, dependents, artisans, labourers in the public service, and others, form a class of persons for whom, or by whom, payment should be made proportionate to their average cost in the hospital—payment, not only for board, nursing, and medicines, but also, by some of them at least, for remunerating reasonably the physicians and surgeons; the medical staff consisting of all those gentlemen, within reasonable distance, who possess certain specified qualifications, who consent to receive such remuneration, and who are willing to conform to the regulations of the establishment; and the choice of professional advice being left to the patients, or to those who pay for them.

If this class were treated separately, either in small hospitals and detached houses, or in *separated portions of existing institutions under distinct financial arrangements*; and if the right of admission to such institutions, or parts of hospitals, might be secured either by individual contributions or by mutual insurance; not only would a safe and innocent opportunity be afforded for associated effort, but the working-classes would be provided, on sound principles, with aid of the most valuable kind, whilst the ground would be cleared for the entire abolition of privilege, or purchasable right of occupation, in the old hospitals, which for the future would be confined to their true object—the relief of the sick-poor, or persons just beyond the pauperism of workhouse-infirmaries.

The experience of the Free Infirmary of Edinburgh almost settles the question of the practicability and expediency of abolishing the privileges of subscribers; and the change might be introduced generally whenever due provision shall have been made, elsewhere or otherwise, for those classes who may fairly claim the right of purchasing the advantages of Hospital-accommodation and treatment. Under such arrangements, we should hear far less, if at all, of the financial embarrassments which now commonly result from the "compound method" of *free* admissions in cases of urgency, and *privileged* admissions on the recommendations of subscribers.

In hospitals thus reformed, the "social fitness of applicants for relief" ought probably to be inquired into by a special and non-medical officer, subject to the board of management. This inquiry into circumstances is not a proper or even decent duty for the medical officers, and it should never be left to them. That point being first settled, the selection of cases according to their severity and urgency should be left wholly to the medical staff. How easily, equitably, and beneficially would both these questions be determined were there no conflict with the "rights" of benefactors.

III.—Conclusions on the third head ought, I think, to be deferred until information on the whole subject shall have been obtained by competent authority. A general reform in administration would, indirectly, settle many such collateral questions.

IV.—(a.) Towards "an uniform system and publication of hospital accounts", the first step, as before, would seem to be governmental inquiry. No concerted or voluntary scheme of mutual inspection could be expected to answer the purpose generally and permanently. Hospitals, maintained wholly or largely by endowment, ought, I submit, to be brought under the same system of official investigation and legal control to which all other endowed charities are soon to be subjected.

(b.) The question of "records of mortality and sickness" belongs to a much larger subject; viz., a *national registration of all sickness, etc., attended at the public cost*; and for this measure, sanitary reformers are earnestly contending. Such registration, were it made by public authority in every district for the registration of deaths, would include all cases of disease and injury treated in hospitals and public institutions, and their mortality—the precise locality from which each case proceeded being an essential part of the record.

Any institution refusing to supply the required information, ought to be deprived of legal recognition as a place of medical instruction. It is