SYPHILIS OF THE LIVER WITH THE PICTURE OF BANTI'S DISEASE.

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From the tangled skein of splenic pathology we have for years been trying to unravel one definite thread, and it looks as if, at last, the attempt had been successful. There is now recognised a disease splenic origin characterised by:—

(1) Progressive enlargement of the organ, lasting for many years, and not necessarily impairing the health.

(2) Anæmia of a secondary type, with leucopænia, which may come on acutely and recur at long intervals.

(3) A final stage, with cirrhosis of the liver, jaundice and ascites.

That permanent cure follows the removal of the organ, even in long-standing cases and after the jaundice has supervened, is a strong warrant for the belief that the primary lesion is in the spleen itself.

It is a serious difficulty that a motley group of maladies is associated with big spleen and anæmia. From the form just described, which may be called Banti's disease, we have gradually separated off other conditions, such as splenomegaly with acholuric jaundice, splenomegaly of the Gaucher type, splenomegaly with primary pylethrombosis, and certain forms of tropical splenomegaly. Then in a few cases of chronic infectious endocarditis the early history suggests splenic anæmia. Parkes Weber has reported such a case with enlargement of the spleen, and a red blood count of 1,700,000 and a leucocyte count of 1,900. I have recorded a very similar one, in which the picture of the spleen and the low blood count led to the diagnosis at first of splenic anæmia[1]. No condition is more apt to cause confusion than splenomegaly associated with various forms of cirrhosis of the liver. Occasionally in the ordinary Laennec type the spleen is greatly enlarged, and the anæmia is pronounced. More than once I have been deceived by this picture.

In this brief paper I wish to call attention to a group of cases of syphilis of the liver in which the splenomegaly and anæmia are so dominant that splenic anæmia or Banti's disease is diagnosed. The first case of this kind which I saw was in a girl, aged 22, admitted to my wards in November, 1890,[2] with ascites. She had been a delicate child; had not walked until the fourth year. When aged about 15 she had an obscure illness with trouble in the abdomen, with which she was confined to bed for six months. Ever since the abdomen had been somewhat enlarged. For the past three years she had been fairly well. Her present illness dates from two weeks ago, when she had a chill, headache, and pain in the left side, with fever. She has been at work until two weeks ago.

Condition on admission: The patient was a small, delicately-built, anæmic girl, with a very sallow facies. She sat up in bed; was unable to lie down on account of pain. The temperature was 103.5° F., the pulse 120, respirations 36. There was marked deformity of the chest, owing to a flattening of the right side from old disease. The left side of the chest was large and moved very freely. There was a marked curvature of the spine due to the old contraction, following the chronic pleurisy. The abdomen was distended, measuring 78 cm. at the level of the navel. The enlargement was not symmetrical, but was more marked in the left flank and in the hypochondrium. There was also a distinct protuberance in the right hypochondrium. The superficial veins were slightly enlarged. On palpation the abdomen was sensitive, particularly on the left side, and at the edge of the ribs there could be felt a firm mass, which extended nearly to the left inguinal region. Towards the right a sharp edge could be distinctly felt. It was movable on bimanual palpation. There was no question that this was an enlarged spleen. On the right side, occupying the epigastric and hypochondriac regions and the upper umbilical region there was an irregular firm mass which extended a little below the level of the navel. The edge was rounded and hard. Deep in the right flank and apparently connected with it there were two smaller masses to be felt. These descended with inspiration, and they were thought to be in connection with an enlarged liver. The inguinal glands were a little larger than normal, and were very firm. The epitrochlear glands were enlarged, freely movable, and nowhere matted together. The blood count was: 2,234,000 reds per cubic millimetre, and a ratio of white to red of 1 to 25; hæmoglobin 28 per cent. On November 14 the ratio of white to red was 1 to 16.

The temperature fell from 103° F. on November 11, and on November 14 was 99.5° F. She complained a great deal of shortness of breath, vomited, and seemed very ill. The urine was scanty, specific gravity 1020, contained a small amount of albumin and a few hyaline casts. The pulse became very rapid. On November 15 and 16 she had nausea and vomiting, became unconscious on November 16, and died early on the morning of November 17.

AUTOPSY (Dr. Councilman).—The external lymph glands were enlarged and hard. The peritoneal cavity contained 200 c.c. of slightly bloody fluid. The lower border of the spleen was 11 cm. from the ribs. The mesenteric and peritoneal lymph glands were moderately enlarged and hard. Both liver and spleen were surrounded by firm fibrous adhesions. The liver was brownish-yellow in colour, very tough and hard. It was divided into a number of nodular masses from the size of an apple to that of a filbert, some of them almost separated from the liver and only connected with it by a thin pedicle. The greater portion of the liver was made up of an enlarged left lobe. The right lobe was divided up by bands of connective tissue into the nodular masses already mentioned. On section of the liver there were large bands of connective tissue which traversed it in different directions, and from which smaller bands were given aff. The largest of these bands ran between the right and left lobes. There were in addition fibrous gummata which projected from the capsule into the liver substance, and in these were hard necrotic areas. The portal vein was dilated to double its normal size. The spleen mesured 23 cm. by 16 cm. The surface was covered by slight adhesions, but was otherwise normal. The surface of the section was firm, of a dark purple-red colour. Neither the trabeculæ nor the Malphighian bodies were visible. The organ weighed 1,510 grm. The right lung was small and firmly bound down by old adhesions. In the lower part of the pleural cavity there was a collection of 70 c.c. of opaque, gritty, semi-fluid material.

1 Interstate Med. Journ., February, 1913.
2 John Hopkins Hosp., Bull., ii, p. 18,

The blood picture was that of leucæmia. It was before the days of accurate differential counts. A very similar case has been reported by Hoche from von Jaksch's clinic[3] in a girl, 20, admitted with the clinical picture of splenic anæmia. With a progressive fall in the red corpuscles there was an increase in the leucocytes, which reached 58,400 per cubic millimetre—1 to 46 red. The autopsy showed syphilis of the liver.

A very similar picture may be present in acquired syphilis. On December 11, 1897, a man, aged 34, was admitted to the John Hopkins Hospital with an enormously enlarged irregular spleen, a red blood count of 1,400,000, leucocytes 7,500 per cubic millimetre. The patient had had syphilis, and three years ago had been in another hospital with jaundice and dropsy, both of which had gradually disappeared. For eighteen months he has noticed the gradual increase of a mass in the left side of the abdomen, and he has become anæmic. The spleen extended beyond the navel and below the level of the anterior superior spine of the ilium. It was freely movable, irregular in shape, the edges rounded, but notches could not be felt. The liver formed an irregular mass in the right hypochondrium, with rounded edges and fissured surface. The picture was very like that of primary splenic anæmia, but the history and the condition of the liver left, I think, no doubt of the nature of the disease.

For the past four or five years there has been under observation at the Radcliffe Infirmary a boy who, at the time of his death, was aged 11. In 1906 and 1907 we had him in the ward for the examiners for the M.B. as a case of splenomegaly. We did not recognise the nature of the trouble until some three or four years ago, when he was admitted with nodes on the shins and syphilitic arthritis in the left knee. At this time the liver was slightly enlarged and a little irregular, but the blood count was practically normal. The father had died of obstruction of the bowels. The mother had lost several children, but there was nothing to suggest syphilis in the family. The spleen was very large, reaching to the right beyond the navel, and below the anterior superior spine. It was smooth, not painful, and the notch could be felt. When first under observation the liver was enlarged and irregular, the left lobe easily palpable. Subsequently the liver decreased in size and the rounded edge could at once be determined. His last admission was under Dr. Collier on Christmas Day, 1912. The following is an abstract of a long history:—

He looked fairly well. Red blood corpuscles, 5,770,000; leucocytes, 4,640; hæmoglobin, 65 per cent. The spleen was about the same size as on previous admission, filling the greater part of the left half of the abdomen. The liver could not be felt in the middle line. In the nipple line an ovoid, somewhat irregular, smooth tumour could be felt. The fingers could be placed beneath it and under the surface was distinctly irregular. In January ascites came and increased rapidly, so that he had to be tapped. On February 15 he had bleeding from the gums; on February 23 a severe attack of vomiting of blood. The anæmia then became pronounced, the red blood corpuscles falling below 2,000,000 the ascites recurred, and he had to be tapped several times. The spleen became much reduced in size. There was a slight rise in temperature, and during the day he had to be tapped again. On February 24 he again had vomiting of blood, and he died on the night of February 27. The Wassermann reaction was negative.

The post-mortem, by Dr. A. G. Gibson, showed (1) the usual features of anæmia; (2) œsophageal varices, from one of which the bleeding had come; (3) a greatly enlarged spleen, and (4) a syphilitic liver, which presented very remarkable features. The left lobe was reduced to a thin flat band; the right lobe was reduced in size, much scarred, fissured, and cirrhotic, with many coarse bands dividing islands of greyish-yellow liver substance. The most interesting feature was the oval mass which was felt during life, as it was attached to the anterior portion of the right lobe, the capsule somewhat thickened; in section the surface was smooth and of a normal, red-brown colour, without a trace of cirrhosis, but there were several small gummata, from about 3 to 4 mm. in diameter. This was really the only normal portion of the organ.

The point which I wish to emphasise in this paper is that syphilis of the liver may present a picture clearly resembling Banti's disease, the splenomegaly, anæmia, and hæmatemesis completely overshadowing the hepatic features. The spleen has been removed as in the case of spenic anæmia reported by Dr. S. Coupand.[4] Splenectomy was performed by Mr. Pearce Gould. Two years later the patient died with melæna, hæmatemesis and ascites. The post-mortem showed typically scarred syphiitiic liver, with varicose veins in œsophagus and rectum.

[3] Berl. klin. Wochenschr., 1902, No. 16.

[4] Brit. Med. Journ., 1886, i, p. 1445.