A LECTURE ON PERITONITIS.

Delivered at the College of Physicians and Surgeons, N. Y.

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(Reported for the Hospital Gazette.)

This disease is important from the great extent of the membrane, which is arranged in the form of an irregular sac, with no openings of any great importance. It is important in its connections with liver, intestines and stomach, for when a viscus is inflamed and the inflammatory action reaches the surface it will involve the serous membrane of that viscus, and consequently when a membrane is inflamed the action will proceed to a limited extent to the viscus. As regards degree, this serous inflammation stands next to *arachnitis*. This is not very common inflammation, much less frequent than the inflammation of pleura and pericardium. Pleurisy is most common of all. To me it seems that peritonitis is most common in mountainous districts. I think I have seen more of this disease in Vermont than in all other places together, including hospital practice. I shall consider peritonitis under four heads. 1st. Sporadic peritonitis. 2nd. Peritonitis from perforation. 3rd. Puerperal peritonitis. 4th. Chronic peritonitis, which is almost always associated with tubercles. We may have any of the three products of serous effusions, but there will always be plastic exudation which will be found more posteriorly on account of the supine position which these patients assume. In the ordinary forms there will be serum and fibrin. Pus is very rarely found alone. In the chronic form the plastic effusion will be organized in layers, the greatest quantity on the surface of intestines. Tubercles will be usually found in connection with the organized matter. Purulent effusion is frequent in the 2nd form of the disease.

SPORADIC PERITONITIS.

The rule is that this is a very painful disease, and that the pain begins at one point and spreads rapidly. This symptom is observed early in the disease. A chill does not commonly occur. The pulse does not feel the influence of the disease until a later period, as a rule. I believe that we have no acute inflammation where the pulse runs up as high as it does in peritonitis. Constipation of an unyielding character exists in the height of the disease. This is as complete as if produced by some obstacle in the intestinal canal. The inflammatory condition extends just through the muscular coat of the intestinal canal (the same plexus of vessels supplying both the muscular and peritoneal coats). When a muscle is inflamed it cannot act, and to this paralysis is to be attributed the constipation; as long as the intestines are in this condition cathartics can only do harm by exciting inflammatory action in the mucous coat. This constipation lasts the whole time that the inflammation is severe.

Vomiting frequently begins in the early stages of this disease, and is due to reflex action of par vagum. The contents of stomach are first thrown up, then the greenish "*spinach-like matter*," whose color and appearance is due to biliverdine. The explanation of this fact is not known, but it occurs in other diseases. Gaseous extension or tumefaction of abdomen called tympanites or meteorism is present in first twelve hours. This gas which is chiefly C O_2., is contained in the intestinal cavity and not in the peritoneal cavity. It does not readily escape, and this forms one of the differences between this and other diseases. The tympanites is one of the most common and marked symptoms of the disease. The countenance becomes pale, with the expression of calmness; features are somewhat pinched. This condition is known as the "Hippocratic countenance." The mind is generally clear. The urinary secretion is not generally affected, but there may be inability to pass urine from adhesions of the bladder. There is no special condition of tongue, sometimes slightly furred.

The causes are: 1st. The obscure causes which produce inflammation.

2nd. Perforation of stomach, colon or vermiform appendix. Perforations of stomach are from two causes.

1st. Perforating ulcer, which occurs near the pylorus and sometimes partly in the stomach and partly in the duodenum. This ulcer appears like a little "well," and causes thickening of tissues to the extent of ¼ in. When perforation takes place the contents of stomach pass into the peritoneal cavity and persons die in 12 or 16 hours, though they often live to the second or third day. There may be ulceration of stomach without endangering life, as in spinal or apthous sore mouth of children. They are not of common occurrence because ordinary inflammation does not produce them. This, however, must not be taken for the erosion caused by the solvent action of the gastric juice after death. In protracted diseases this erosion does not take place because it is not apt to be taken to any extent previous to death. Some years ago an ulcer was found in a Bellevue patient 3 in. by 2½ in. extending to pancreas and liver and producing erosion, and opening two large vessels of the liver, which gave rise to fatal hemorrhage.

2nd. Stomach may be perforated by cancerous disease, and then it is rapidly fatal. These are the only causes of perforation of stomach. Perforation of intestine at duodenum may result from an ulcer, and is much the same as perforation of the stomach; this form is *less rapid*. I have never seen an instance of perforation of jejunum. Perforation of ileum may happen in *typhoid* fever near the ileo-cæcal valve; pain will first be felt on the right side low down. The whole colon is susceptible to perforation during acute *dysentery*, or from *ulcers* or cancerous disease. The ulcer is very much like that in stomach. They are *circular*, and have been known to surround the intestine. Ulceration may