

ated stomach who rolled around the bed, and assumed the knee-chest position as you would expect of a patient with hepatic or renal colic.

This rigidity soon becomes board-like all over the abdomen and this taken with the sudden pain mentioned is quite characteristic of a rupture of some internal organ.

After perforation the gastric contents flow towards the anterior surface, usually under the liver and towards the right lumbar region, from here on past the "McBurney" region into the pelvis. As more accumulates it extends up the left side. We frequently get dullness at this time in the region of the appendix and we are apt to think the appendix is in trouble. I well remember the first case of gastric perforation I ever operated on; there was so much dullness in the region of the appendix (eighteen hours after the perforation had taken place) that I may my incision over that region at first. My mistake was soon observed and I at once opened the upper right abdomen and found the perforation in the stomach. The patient recovered.

In percussing the abdomen in these cases we may find a disappearance of the liver dullness; this is very significant. As the stomach contents pass through the perforation so does air, and this air raises the abdominal wall from the liver surface and we get tympany when we normally get liver dullness. Of course, we may get a disappearance of liver dullness from an *over* distention of the abdomen from any cause—for example, in the over distention of intestinal paresis in typhoid. But a very *moderate* distention of the abdomen with a disappearance of the liver dullness must not be disregarded. And again we must not always wait for this symptom, as I once did to my regret and the patient's disaster.

Percussion will also tell us whether we have free fluid in the abdominal cavity. In nearly every case the amount of free fluid is considerable and it can be detected quite early accumulating in the flanks. There are three other conditions of acute abdomen in which we may get a considerable amount of fluid, there are: (1) Ruptured appendix abscess, (2) ruptured ectopic, (3) ruptured pyosalpinx.

In this connection Dr. Tubby, of London, has had an interesting and instructing experience which I have referred to in previous articles and venture to do so again here. He reports a case where he saw, with the family physician, a patient in the evening suffering from pain and other symptoms of gastric perforation. He saw her again early next morning and as the liver dullness had then disappeared he diagnosed gastric perforation. The diagnosis was confirmed at operation and the patient recovered. In about one year later the same patient was seen by the same doctors, and she had very much the same symptoms. When