so rapidly, except when due to perforation. No one can doubt that this girl would have died in two or three days with the ordinary opium treatment. In my own experience, and in consultation with other medical men, I have seen many such cases. When the symptoms develop rapidly, the pain and tympanitis being great, I have never seen one recover. These are the cases where a prompt laparotomy is not only justifiable, but imperative. It will not make the patient's chances worse in any case, and if any remediable condition be disclosed, it may save life.

For many years operation has been resorted to with numerous permanent recoveries, for tubercular and suppurative peritonitis. Such practice is now well established, so that there can be no doubt of its propriety. But the question of operation for peritonitis from perforation, though often discussed, is still open for discussion.

In many cases, the prompt death of the patient ends the discussion as to operation in an individual case. Such a case is reported in the *British Medical Journal*, September, 1890, page 734. The patient died in twelve hours from the onset of the attack. The peritonitis arose from detachment of adhesions surrounding an old perforation of the stomach. Instead of an operation, there was an autopsy, which disclosed these facts.

I remember a case in the practice of a confrère in the city of Guelph. A young woman died in eighteen hours from the first symptoms. In the evening she complained of acute pain, which she referred to the stomach. During the night, under an opiate, she slept a little, and took some breakfast next morning. At noon she died. The autopsy disclosed a large perforation in the posterior wall of the stomach, and portions of food free in the peritoneal cavity. There was very little trace remaining that there had been peritonitis. In those cases when death occurs within twenty-four or thirty-six hours, the autopsy may fail to show clear evidence of peritonitis.

As to idiopathic peritonitis and some forms of puerperal peritonitis, in view of the success attending the heroic opium treatment so strongly advocated by Dr. Alonzo Clark, we cannot wisely urge surgical interference, because we cannot expect better results than the records furnished by the opium treatment. In perforative peritonitis, however, it is useless to rely upon opium, however boldly administered. In the few cases that survive the first twelve hours after the perforation has occurred, if the patient's condition warrants surgical interference, I think we have the right to urge prompt laparotomy, as affording him the only possibility of recovery.

A very important question then arises, How are we to distinguish the cases that require operation from those that do not? A careful study of the symptoms will aid us. When there is a large perforation of the stomach or bowel, death occurs in part, at least, from shock. The pain is not such an urgent symptom as a sinking, oppressed feeling. Operation in these cases, it would seem to me, would add to the shock. Then in the idiopathic form, the symptoms do not develop with such extreme rapidity as when due to a perforation. It takes two or three days to develop conditions that peritonitis from perforation manifests in twelve to sixteen hours. When the onset is sudden, the pain extreme, the pulse rising rapidly from 70 or 80 to 120 within twenty-four hours, and the tympanitis also rapidly increasing, with vomiting and obstinate constipation, not even flatus passing from the bowels, I am confident no mistake can be made by resorting promptly to laparotomy.

CHOLERA.*

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The morbid anatomy of cholera presents but few characteristic appearances to account for the violent and rapid nature of the disease. We should naturally look to the intestinal tract for evidences of the cause of the severe vomiting and purging and cramps, yet all observers agree that inflammatory changes are slight or altogether absent. Goodeve, after referring to the occasional enlargement of the intestinal glands, both solitary and agminated, noticed by Boehm, slight œdema of the mucous membrane of the small intestine, and the rare presence of greyish exudative patches, goes on to say: "In many cases there is little or no congestion or decided morbid change discoverable on examination of the mucous membrane or glandular structure." This is not invariably the case; some-

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