

tions of bones, and joints, and infection of the bile passages, but it is in that dreaded and fatal perforation of the intestine that the physician and surgeon together have already accomplished much, and I think are likely to accomplish more.

We have had in the Montreal General Hospital during the past six years, 34 cases of typhoid perforation of the small intestine. Of these we have been able to save 18.18 per cent.

The diagnosis of this lesion presents only too often the greatest difficulty. We have not found the blood count to be a reliable guide as a diagnostic sign. It may be present to the extent of ten or more thousand leucocytes without the presence of perforation and it was absent in one case twelve hours after the occurrence of symptoms of perforation, although when the abdomen was opened a perforation was found.

One very important point to remember in dealing with these cases is that in the majority the occurrence of a typhoid perforation is not at all clearly indicated by any well marked group of symptoms. On the contrary, one must be on the alert to notice the first indication. The onset is so insidious that in some cases the House Physician has not thought it necessary to report to his chief, who has discovered the serious condition only when making his ordinary ward visit.

We place reliance upon the occurrence of pain, when persistent and accompanied by persistent local tenderness, change in the character of the respirations, from abdominal to thoracic, and abdominal rigidity. There may or may not be vomiting. The temperature may fall or rise or remain stationary, and the pulse may for some hours show wonderfully little alteration. The diagnosis is exceedingly difficult and sometimes impossible in patients who are suffering from typhoid toxæmia, and distended tympanitic abdomen.

The experienced and observant physician and surgeon can generally, however, arrive at a pretty accurate diagnosis, but there are a group of cases which in spite of the greatest care and the use of every known test, may yet remain in doubt. It is in these cases that, I believe, proper facilities being available, the more truly conservative procedure is to make an exploratory incision. In some cases this may be done under local anæsthesia, a little ether being given later if found necessary.

Although the success so far obtained is encouraging and many lives have been saved, I believe a much larger percentage of recoveries will follow in the near future as the result of a greater experience in diagnosing. Surgeons are not all agreed as to the time to operate, some advocating delay until shock has passed away, and others, very