

again for two weeks. When seen then he said he had had moderate pain in the abdomen for two or three days. He was found sitting in a chair, looking much distressed. There was fluid in the abdomen to the level of the anterior superior iliac spines. The abdominal wall was not tense nor was there great tenderness. Death occurred next day and at the autopsy two small typhoid ulcers were found in the ileum and a perforation 1 mm. in diameter at the bottom of one of them.

The other case was even more instructive. It was that of a man, aged 32, in the General Hospital a few years ago. His illness was moderate in degree; there was slight diarrhoea but the abdomen was of normal appearance and his mental condition was quite clear. In the third week, one afternoon while I was in the hospital, he felt a rather sudden, though not severe, pain in the lower part of the abdomen, but not distinctly localized. There was no tenderness or increased tension in any part of the abdomen, nor change in temperature, pulse, or respiration, or in the facial expression. He himself regarded the pain as of little moment. The instructions left were that he was to have plenty of water but no food nor any anodyne; he was to be closely watched and his condition reported in three hours—sooner if he were worse, the intention being to have an operation done if even this moderate pain persisted. He was reported in the evening as free from pain, and concern regarding him was dismissed. On seeing him next day, there was no apparent change in his condition but he said the pain still persisted. It was then found that through some misunderstanding, morphine, grain $\frac{1}{4}$, had been given the evening before. His pulse was about 90 and temperature 102 F., the same as for some days previously. The abdomen was flat, quite soft everywhere, not tender nor presenting any abnormal condition. My colleague, Professor Cameron, saw him with me and we concluded that the persistent pain, though slight, must be due to an organic lesion and, therefore, almost certainly to perforation, and we decided to operate. An oval perforation, about 1 cm. in the long axis, was found about thirty inches above the ileo-cæcal valve and the coil of intestine in which it occurred lay down in the pelvis behind the bladder. The general peritoneal cavity was fairly protected by the filling of the inlet of the pelvis by other coils of intestines. By this time, however, twenty-six hours after the onset of the pain, and therefore after the occurrence of the perforation, infection had been carried up to the root of the mesentery by the lymphatics which were marked out by red striæ, and it was to this infection that the fatal result four days later was due. Had the operation been done early, as intended if the pain persisted, there is no reasonable doubt that he would have recovered.