

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 an unfortunate 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 intestine. 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.

These two cases clearly emphasize the importance of even slight pain, if persistent, notwithstanding the absence of all other symptoms and signs. The first case probably had no other symptoms and the second certainly had not.

The pain signifies local peritoneal irritation by whatever cause produced, whether with or without perforation. A variety of conditions may be concerned in causing the pain to be slight and in preventing the occurrence of other phenomena. The infective bacteria may possess little virulence; partial adhesions may circumscribe the area of infection and so delay, if it does not prevent, the diffusion of the infection in the peritoneum; the patient may possess a sufficient degree of immunity to inhibit the activity, if not arrest, the growth of the infecting bacteria; and further, some people are but little sensitive to painful impressions.

However, sudden persistent pain in cases of typhoid fever is not always due to perforation, as infection may occur without that accident. This was well illustrated in the case of a woman in the hospital lately; she was apparently suffering from typhoid infection. She had had a miscarriage two weeks before being received into the hospital. She was then suffering from a febrile condition which had existed probably from