The Canada Lancet

VOL. XL. MARCH, 1907 No. 7.

PERFORATION IN TYPHOID FEVER.

By A. McPHEDRAN, M.B., Professor of Medicine and Clinical Medicine, Medical Faculty University of Toronto.

THIS accident is so frequent a cause of death in typhoid fever that it merits our most serious consideration. In recent years, operation has resulted favorably in so many cases that there is good reason to look for much more favorable results as the conditions become more thoroughly understood and the necessity for prompt action better realized.

The frequency of perforation varies considerably in different seasons, just as does the severity of the disease itself. It occurs in about one and a half to three per cent. of all cases of typhoid fever. In the Toronto General Hospital during the last two years the number has been 5 in 240 cases, nearly 2.1 per cent. There were in all twenty-five fatal cases, 10.4 per cent., so that perforation occurred in 1 in 5, or 20 per cent. of the fatal cases. This is considerably higher than the general average percentage of reported cases. In 4,680 autopsy reports examined by Fitz, perforation occurred in 6.58 per cent., and in 2,000 autopsies at Munich there were 114 perforations, 5.7 per cent. However, in the Johns Hopkins series perforations occurred in over 30 per cent. of the fatal cases.

Without studying our own statistics, we can scarcely realize how frequently this calamity overtakes our patients, at least we will find it difficult to have before our minds in each case we see the risk of perforation in that individual case, and in the event of the accident occurring that his life will probably depend on its early recognition, as only in prompt action on our part lies any hope of saving his life.

The character of the perforations is variable and has a marked bearing on the symptoms. First, the perforation may be large, owing to the slough extending through the bowel including the peritoneal coat. Then, as the slough separates, the intestinal contents escape early and freely into the peritoneal cavity and there is rapid diffusion of infection throughout the cavity by means of the lymphatics. More frequently, separation of the slough is delayed; in that case the diffusion of infection is also delayed so that the symptoms of peritonitis are at first local and correspondingly milder. *Secondly,* from extension of the ulcerative process through the peritoneal coat the perforation may occur as a single