

peritoneal cavity, and twenty centimeters from the ileocaecal valve there was a perforation. A resection of the perforated portion of the intestine was performed. Death occurred in two days. At the autopsy numerous typhoid ulcers were found near the point of ulceration.

In the fourth case, belonging to Trianoff, a patient twenty-nine years of age had been sick for fifteen days with fever. He was seized with violent pain in the belly followed by intense chills, vomiting and hiccough. There was abdominal swelling and general pain. The symptoms were those of perforative peritonitis. The operation began sixteen hours after the accident. Abundant sero-purulent fluid was found in the abdominal cavity and perforation of the intestine had occurred ten centimeters from the ileocaecal valve. Resection of the perforated segment was performed and death occurred fourteen hours afterwards. The autopsy revealed typhoid ulcers in the ileum.

In addition to these cases Gaecelewitsch and Wanach report five more. The first of these was a man thirty-six years of age, who had had typhoid fever fifteen days. After eight days he had had bloody stools, violent pain in the belly followed by intense chills, vomiting and hiccough. The belly was swollen and the pain was general. The pulse was 120, the temperature febrile. An operation was performed two hours after the perforation. On exploring the intestines two perforations were found, one two centimeters in diameter, the other much smaller. Twenty centimeters of the intestine was resected, and death followed in about two hours.

At the autopsy ten ounces of fetid pus was found in the belly. The parietal and visceral peritoneum were covered with punctiform hemorrhages. The part of the intestine resected was thirty-seven centimeters from the caecum.

The second case was a man of twenty-four years who had been ill some time with typical typhoid fever. Seven days after entrance into the hospital he was seized with violent chills and fever, and all the symptoms of perforative peritonitis. The operation was done seventeen hours after the accident,

ether being given after a preliminary injection of cocaine. Perforation of the intestine was found. The mesenteric glands were enlarged and were adherent to the intestine in places. Thirty centimeters of the intestine was resected. Death occurred in six hours after the operation. The autopsy revealed profound typhoid ulceration at the lower extremity of the ileum. There were also signs of catarrhal pneumonia.

The third case was in a young man of nineteen, who had been sick five days. His fever was high and he had bloody stools. Four weeks after his entrance into the hospital he had perforation of the intestine. His condition remained grave, and on opening the peritoneal cavity it was found to be filled with bloody fluid and there were intestinal adhesions. Death occurred in three days. Again the autopsy revealed perforation and ulceration.

A man of twenty-seven presented mild symptoms of typhoid fever. Six days after his entrance he was seized with violent pain in the belly and with chills and sweating. There was also meteorism. Twenty-four hours after these symptoms the operation was performed. Again the belly was found filled with sero-purulent fluid. Thirty centimeters of the intestine was removed and contained four ulcers. Notwithstanding injections of saline solution the patient died eight hours after operation. Again the autopsy confirmed diagnosis.

In the fifth case a man of twenty-nine entered on the seventh day of typhoid fever; six days later violent pain in the caecal region came on with moderate fever. Surgical intervention took place thirteen hours after the accident. The abdominal cavity was filled with serous fluid. The walls of the intestine were edematous. Resection was performed. Death occurred in three days. The autopsy revealed the characteristic lesions and pneumonia of both bases of the lungs. Altogether these authors quote seventy-one instances of perforation in the course of typhoid fever, with seventeen recoveries. The number of deaths in operation for perforative peritonitis in typhoid is necessarily high.

In regard to the time for intervention it is