

conditions affecting the surroundings of persons may influence the predisposition; as given a case in a household and the chances of infection of other members are greater among the poorer classes where crowding is more common and isolation and disinfection are less efficient. Barneger states that typhoid is common among trackmen on railroads.

The lesions of typhoid are found chiefly in the lymph vessels and glands of the mesentery. The Pylers patches become infected and generally break down about the last of second or the third week of the disease and cause ulcers of the intestine. Ulcers are also occasionally found in the large intestine about the hepatic flexure. The liver, spleen and kidneys are generally found enlarged, red and swollen. There is also often a general catarrhal condition of the lungs.

The bacillus typhi abdominalis, the specific organism of the disease is a motile bacillus and is found both within and without the human body. It occurs in the lesions of the intestines and in the intestinal contents especially during the second and third weeks of the disease. It also occurs in the spleen, liver and kidneys. The lungs, parotid and post typhoidal abscesses may also contain the organism. Patients after recovering from an attack of typhoid may discharge the germ for years and one woman has been known to discharge the living germ eighteen years after an attack.

The amount of destruction or disturbance in proportion to the constitutional disturbance is in the majority of cases slight and almost always partakes of a necrotic character and which suggests as pointed out by McFarland that in typhoid we have to do with a toxic bacterium whose disease producing capacity resides in the elaboration of toxic substances. Further proof of this was found by Berger and Frankel who separated from a bouillon culture a toxalbumin which they thought to be the specific poison. Klemperer and Levy also pointed out in certain cases dying with typical picture of typhoid yet without the characteristic post mortem lesions. The only confirmation of the diagnosis being the presence of the bacillus in the spleen.