

the intestinal contents themselves, would imply that in carrying out this plan of treatment purgatives are given with the sole purpose of clearing typhoid bacilli and the poison generated by them from the intestine.

Such is not the case, and it is manifestly a misrepresentation of the theory of eliminative treatment to convey any such idea to the mind of the reader. In all my published papers³ I have taken the utmost pains to combat this error and to point out that the idea of elimination by means of purgatives must not be limited or confined to the simple clearing of bacilli and toxins from the intestine, but must also embrace withdrawal of toxins from the body by way of the intestine. In short, elimination in typhoid fever must be understood in the same sense as elimination in, for example, lead poisoning.

The idea in the use of purgatives in the treatment of typhoid fever, if I may be permitted again to outline the theory, is:

1. To facilitate throughout the entire duration of the disease elimination of toxins from the body.

2. To clear out the intestines at the earliest moment, carrying away bacilli and toxins which would otherwise in all probability go to increase the existing infection and intoxication of the body.

3. To keep the intestines as free as possible from bacilli and toxic substances, thus preventing in a great measure reinforcement to the bacilli and toxins already located in Peyer's patches, the solitary glands, mesenteric glands, spleen, and other parts of the body.

4. To maintain the bowels free from bacilli, of all kinds, and from accumulations of decomposing and toxic substances, and thus to enable the liver to exercise its poison-destroying and depurative functions to greater advantage against the poisons produced by the colonies of bacilli situated in the lymphatic structures, spleen, or elsewhere in the tissues and fluids of the body.

Modern physiology has made it clear that one of the greatest functions of the liver is to intercept and destroy or cast out of the body toxic substances found in the circulation.

The toxic substances must of course be carried to the liver either by the blood stream in the hepatic artery or by the veins of the portal system.

As a result of this poison-abstracting function of the liver, the pint or more of bile daily poured into the intestine is under ordinary circumstances in the healthy body highly toxic. Semmola and Gioffredi in their recent work on "The Physiology of the Liver and the Function of Bile," in the "Twentieth Century Practice,"⁴ accept the estimate made by Bouchard, that the bile is under ordinary circumstances nine times as toxic as the urine.⁵ They also draw attention to the fact that in case of bacterial invasion, such as typhoid fever, the toxicity of bile becomes immensely increased.⁶

It is therefore most reasonable to assume that by frequently