

Dominion Medical Monthly

And Ontario Medical Journal

Vol. XLIV.

TORONTO, JANUARY, 1915

No. 1

Original Articles

SARCINAE OF THE STOMACH AND THEIR DIAGNOSTIC VALUE

BY GRAHAM CHAMBERS, B.A., M.B.,

Associate Professor of Clinical Medicine, University of Toronto.

The occurrence of gastric sarcinae in the contents of certain affections of the stomach was first called attention to by Goodsir in 1842. Since then, Falkenheim, Richter, and many others have contributed to the literature of the subject. Still, there is very little known concerning the cultivation of the micro-organisms; and the diagnostic value of their presence in the gastric contents is to a considerable extent undetermined.

As far as we know gastric sarcinae are peculiar to the stomach. They are formed sometimes in the feces, but never, except when present in the stomach; and it is very probable that the primary growth of the germ never occurs in the intestine. The origin of the growth in the stomach has never been solved. The shape, size, and other characters of gastric sarcinae indicate that they have practically nothing in common with the pigment-forming sarcinae of the air.

Morphologically, there are two forms of sarcina ventriculi, which are, however, probably different stages of development of the same organism. One, sometimes called the large-celled variety, is characterized by the cells exhibiting an arrangement known as the bale shape and staining yellow with Lugol's solution; the other, a small-celled form with cocci in irregular groups and not staining with iodine. Both forms are always found together, although the growth of one may preponderate. The characteristic form of the bale-shaped variety renders it easy of detection.

What is the diagnostic significance of sarcinae in the gastric contents? In general, stagnation of gastric contents tends to pro-

