

"Through the increase in size of the uterus the motor nerves of that organ, the sympathetic and the vagus, are at once mechanically irritated. They, being irritated, bring about respectively contractions of the uterus and of the stomach. Irritation of the vagus increases, however, the secretion of the gastric juice, and also the mucous production, so that the alkaline mucus frequently neutralizes the gastric juice, which is often observed in cases of hyperemesis. These changes form a predisposition to the formation of toxins, which is still more increased by the atony of the whole intestinal tract, which is present in all severe cases." Dirmoser thus considers that the uterine contractions are the result of irritation due to mechanical pressure of the enlarged uterus upon the motor nerves of that organ, and that the contractions so produced are evidently pathological.

I cannot do better than quote verbatim the summary of the present views as to the explanation of vomitus gravidarum which is given in *Progressive Medicine* for September, 1899."

"The possible ways of explaining vomitus gravidarum are: (a) Direct vomiting may be produced by an abnormal condition of the vomiting centre, due either to the irritating effects of chemical substances, toxins, etc., circulating in the blood, or to nutritional changes caused by variations in blood pressure in the medulla, or to other circulatory changes. (b) Reflex vomiting may be produced by sufficiently powerful impulses sent from the genital tract, causing an irritation of the vomiting centre. (c) Vomiting may be produced by a combination of influences affecting the vomiting centre both directly and reflexly. (d) The psychopathical factor may be important, as in the vomiting of hysteria.

"We must assume that in two-thirds of all cases of pregnancy there exists an increased irritability of the medullary centre, due wholly or in part to one or both of these two factors: (a) Nutritional changes resulting from circulatory disturbances; (b) poisoning from toxic elements circulating in the blood. We must further assume that this abnormally irritable vomiting centre is acted upon by afferent impulses sent from one or more of a variety of peripheral sources. Among the most important causes of reflex irritation are an incarcerated retroflexed uterus, abnormal adhesions of the uterus, pathological changes in the uterine wall resulting from endometritis, pelvic congestion, constipation, gastritis, etc. To these sources of afferent impulses we must add the psychopathical or hysterical condition, which is of especial importance in the more serious cases."

A brief consideration at this point of some of the more important conditions which are present in the gravid uterus will make my further remarks more intelligible. Tarnier has said, "All the properties of the