

The irregular course of the disease, with its remissions and exacerbations, its irregular fever, the frequent disturbance of the mental condition, and the occurrence from time to time of vomiting and diarrhea, all indicate a common toxic cause.

The fact that the general condition does not bear a definite relationship to the blood state, goes to show that there is something else than the poverty in corpuscles on which it depends. This is well illustrated by the contrast between the condition of a miller who was able to do without difficulty all but the heaviest work of his mill and yet his blood only had 1,000,000 red corpuscles per c.mm., and that of a physician with over 4,000,000 corpuscles whose case is given in detail under the head of treatment. In the case of a member of the Canadian House of Commons, during the past year, there has never been more than 3,500,000 red corpuscles per c.mm., and yet he has not only regularly, and with marked ability, attended to his duties in the House, but has also conducted a most vigorous election campaign without either detriment or exhaustion. It is to be noted that in these as in all cases during well-marked remissions, the color-index is always near the normal, and that the corpuscles show less deformity and there are fewer nucleated ones among them.

That the condition is a toxemia is further indicated by the early occurrence of marked weakness. This, in most cases, is the first symptom, and it may be complained of a considerable time before the pallor is observed. It must, therefore, be independent of the anemia to which, as already stated, it is not proportional. In 22 cases observed during the last three years, with scarcely an exception, the first deviation from health noticed was the weakness; pallor followed soon afterwards.

It is to be observed also that the early occurrence of weakness, before, as a rule, any disturbance of the digestive tract is noted, does not support the theory that the toxine is of gastro-enteric origin, or that the digestive tract is the site of infection, but rather indicates that the changes in it are secondary to the toxemia. The disturbances of the stomach and bowels doubtless, however, increase the toxemia and therefore aggravate the condition.

The grounds for the opinion that the toxine is of gastro-enteric origin is the constancy with which disease or disturbance of the function of the digestive tract occurs. Few if any cases are met with in which there is not at some time a history of diarrhea and vomiting. In my 22 cases, diarrhea and vomiting occurred practically in all of them at some period of the disease, usually early, but sometimes later. The *post-mortem* conditions found in the relatively few cases examined do not afford much support to the theory, as in most of them all that has been found is atrophy of the gastric mucosa. Atrophy, however, occurs in gastric carcinoma and many other conditions which have shown no signs of