his urine for a few hours after taking part in these exercises.

Finally, ought the assurance companies to continue to refuse to consider the acceptance of the lives of young men between the ages of say 18 and 30, whose urines are found to contain albumen after exercise when it can be shown that no albumen is present after rest or after a meal? I think not. I have known instances of men who have been absolutely refused because they happened to be examined in the afternoon after exercise, when they would certainly have been accepted had they been examined in the earlier part of the day. To me this seems a very unsatisfactory state of affairs.

I have already apologized for the incompleteness of my observations, but I am anxious to take an early opportunity to draw attention to a subject which seems to me one of great interest and which calls for a considerable amount of further investigation.

REFERENCE.
1 *Lancet*, March 6th, 1886.

AGE INCIDENCE OF GASTRIC ULCER IN THE MALE AND FEMALE.*

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SEVERAL questions continually face us with regard to the etiology of gastric ulcer. Is the affection more common in the male or the female? What is the incidence of the affection in the sexes, especially in the adolescent female? Is there any new light as to the pathology? These problems of both clinical medicine and of pathology are rendered no easier by Dr. Hale White's "Gastrostaxis," in the address which appeared in the *Lancet* of November 3rd, despite its valuable suggestiveness and information.

Regarding the age incidence in the female, there is one fact of importance—namely, the sudden and profuse haemorrhage which occasionally attacks the adolescent female who has made little or no complaint of stomach trouble; it is quite possible that this blood may come from an oozing, but in other cases it has been clearly demonstrated that it is from an ulcerated blood vessel. In one of my own cases, which proved fatal, a perfectly fresh ulcer of the stomach, not larger than a sixpence, was found, but found only when the stomach was stretched out; a large blood vessel was lying across the ulcer, and in it a hole the size of a large pin head; when the walls of the stomach were allowed to fall together again, and lie in the natural folds, the ulcer was not visible; if a careful examination had not been made, it would not have been discovered, and it would most probably have escaped detection at an exploratory operation.

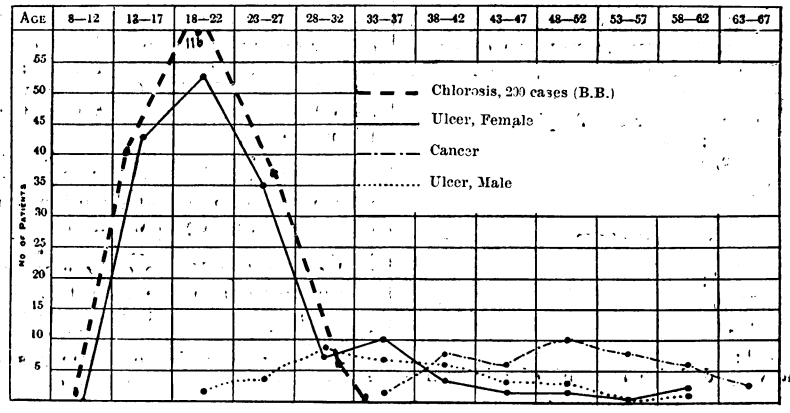
It is very credible that such ulcers both form and heal with great rapidity; clinical histories would make one believe that they may break down in a few hours, and we have operative evidence to prove that wounds in the stomach heal with no greater delay. A healing ulcer is but a wound. We can easily understand that such an ulcer, if once the pathological action had come to an end, and if kept at rest with the edges lying in apposition, might heal in a few days, perhaps in twenty-four hours. In passing, it may be observed that the *post-mortem* appearance of this case supports the view lately put forward that in cases of haematemesis repeated bleeding may be brought about by alternating distension and contraction of the stomach, and that attention is to be paid to the extent of gastric resonance, and frequent sippings of a mild carminative tried as a treatment.

Such cases are not rare, although a fatal termination is rare; but there is still the much larger class of case, which resemble this case in their often slight, evanescent dyspepsia and in their chlorotic condition, but do not complete the picture by an attack of haematemesis; they are mostly classified as "tea," "anaemic," or "neurotic dyspeptics." The simplest explanation seems to be that many of these cases are really cases of ulcers, and that the accident of haematemesis depends on whether the ulcer is situated on a vessel or not, and the accident of perforation, which also occurs unexpectedly, on the depth of the ulcer. In such acute cases where, as happens in the very large majority, no complication occurs, recovery is rapid with rest and a little starvation. Each time, however, these attacks recur, the symptoms of chronic ulcer become more apparent. Nearly every one of these female patients is chlorotic, and if we pursue our investigations, nearly every chlorotic, in marked contradistinction to the adolescent male, has, or has had, some stomach trouble.

Three years ago I tabulated the age at which symptoms commenced in 200 cases, comprising instances both of undoubted gastric ulcer and of these cases in which the symptoms were the symptoms of gastric ulcer without the haematemesis. I then reduced Byrom Bramwell's chart of 314 cases of chlorosis to the proportion of my numbers, and superimposed it on my chart.

A study of this chart shows at once the enormous rise of ulcer in the female during the age of adolescence, and that this rise exactly corresponds with that of chlorosis. Further, chlorosis is absent in the male, and this type of stomach trouble is extremely rare in the male. Again, after the age of 25 to 30, the onset of ulcer is about equal in both male and female. If any one objects that these cases are not ulcers, I shall simply vary the name, and say, "the age incidence of ulcer and of ulcer-like dyspepsia."

Chart showing Ages of Onset of Ulcer of Stomach in Male and Female in 200 Cases.



There is presumptive evidence that if we exclude all cases of ordinary gastric catarrh, of dyspepsia from irritant food, and of dyspepsia of neurotic origin, we have still a large number of cases of "dyspepsia" in the adolescent female which are really due to ulcer; that these ulcers rapidly form and probably as rapidly heal, and that it is only by the accident of haemorrhage or of perforation, or of repeated relapses leading to chronicity that we recognize their real nature; and, lastly, that there are apparently two kinds of ulcer—one connected in some mysterious way with chlorosis and frequently with amenorrhoea, probably being a developmental disease; and the other being a type which occurs pretty equally in both male and female, and is not often seen till after 20.

The importance of this in treatment is paramount. Cases of "dyspepsia" in the adolescent chlorotic female are to be treated as ulcers; and, further, cases of chlorosis, with or without stomach symptoms, are to be looked upon as potential cases of ulcer, and so of haemorrhage and of perforation.

Of a large number of cases which ultimately came into the surgeon's hands, not one, as far as the history went, received full treatment of both ulcer and chlorosis—that is, the due *preventive* treatment of adhesions, hour-glass stomach, chronic ulcer, perforation, etc.

* Excerpt from a clinical lecture.