Summary of Results

Date	Serial No. of Injection	Quantity of Blood Injected	Type of Anti-Rh Antibody			
			Early Immune		Hyperimmune	
			Anti-C	Anti-D	Anti-C	Anti-D
Donor Cusc. (B rr group)						
21/7/50 ..	13	2 ml.	0	0	1	$\frac{1}{2}$
10/10/50 ..	16	2 "	0	0	$\frac{1}{2}$	$\frac{1}{2}$
15/11/50 ..	21	2 "	0	0	$\frac{1}{2}$	$\frac{1}{2}$
15/11/51 ..	26	1 "	0	0	$\frac{1}{2}$	$\frac{1}{2}$
Donor Rum. (O rr group)						
21/12/50 ..	22	2 "	0	0	1	$\frac{1}{2}$
15/1/51 ..	25	2 "	0	0	1	$\frac{1}{2}$
Donor Mas. (O rr group)						
21/12/50 ..	36	2 "	0	0	1	1
15/1/51 ..	38	2 "	0	0	1	$\frac{1}{2}$

These results prove that the injection of D^u red cells can stimulate the production of anti-D antibody (as van Loghem has already observed), that this antibody can be of the blocking variety, and that it has been impossible to detect a specific anti-D^u antibody as was considered possible by Knud Eldon (1950).

We wish to thank Dr. J. J. van Loghem for having checked our results.

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Medical Memorandum

Simple Gastric Ulcer with Achlorhydria

Since Schwarz (1910) enunciated the dictum "no acid—no ulcer," there have been a number of reports—for example, by Abramson (1931), Morlock and Ratke (1949), and Heffernon and others (1949)—of undoubted simple gastric ulcers associated with even histamine-fast achlorhydria on at least one occasion. Nevertheless, Palmer, who has written much on this subject in the last 25 years, has recently concluded (Palmer and others, 1949): "Chronic gastric ulcer does occur in patients with transitory achlorhydria and in patients with low secretory ability, but not in complete and permanent achlorhydria. . . . Further evidence of the validity of the concept of 'peptic' ulcer is provided by the invariable healing observed following the appearance of achlorhydria (spontaneous or induced) lasting 90 days or longer, by the very high incidence of healing in phases of achlorhydria of less than 90 days' duration, and by the failure of the ulcer to recur during the period of achlorhydria." The evidence on which this statement is based seems most convincing.

The following case report, although it does not disprove Palmer's contention, provides another example of the association of simple gastric ulcer with more than transient achlorhydria.

Case Report

A 60-year-old housewife was admitted to hospital in May, 1948, after a small haematemesis. She gave a previous history of a "bad stomach" for some 20 years, her main symptoms apparently being "dreadful pain" in the epigastric region not definitely related to food, wind, disten-

sion, and nausea. She also stated that even during periods of comparative freedom from her digestive symptoms she could not eat new potatoes, meat unless minced, eggs, oranges, solid puddings, and many other articles because they were too "heavy" and made her vomit. During all this period her home life had been very unhappy because her husband regularly beat her.

Her condition on admission was fair, there were no definite physical signs, and her haemoglobin level was 8.7 g. per 100 ml. Two-hourly feeds alternating with two-hourly aluminium hydroxide emulsion were given and she steadily improved. On the eleventh day the benzidine reaction on her stools was negative; on the twelfth day a barium meal radiograph revealed no significant abnormalities; on the eighteenth day a gruel gastric analysis without histamine showed a complete absence of free hydrochloric acid. Her haemoglobin rose to 13 g. per 100 ml. on discharge. I concluded that she had probably had some form of acute ulceration, her previous history not being very suggestive of chronic peptic ulcer.

She attended the out-patient department on August 29, 1950, and stated that she had remained free from appreciable indigestion after her discharge until five weeks previously, even eating freely of those "heavy" articles which had caused her to vomit in the past. She had then become liable to epigastric pain, again unrelated to meals, associated with a poor appetite, some nausea, and general malaise, though without vomiting. Examination revealed slight but definite tenderness over the upper part of the right rectus abdominis muscle. A barium meal radiograph showed a penetrating ulcer crater on the posterior wall of the stomach above the incisura angularis. Two gastric analyses with histamine were performed at an interval of seven days by the following technique. Nothing was given by mouth after 10 p.m. At 8 a.m. the resting stomach contents were withdrawn and 0.5 mg. of histamine was given (on one occasion subcutaneously, on the other intramuscularly). At 8.30, 9, and 9.30 a.m. specimens were withdrawn. Free hydrochloric acid was always absent on each occasion.

On September 23 Mr. S. C. Raw performed a Hofmeister gastrectomy. In the excised stomach were two almost healed ulcers, $\frac{3}{4}$ in. (1.9 cm.) in diameter and $\frac{1}{4}$ in. (0.6 cm.) in diameter, on the posterior wall near the lesser curve. The pathological report by Dr. C. Rickword Lane stated: "The stomach shows two small ulcers on an old healed ulcer-bearing area. Neither shows any evidence of malignancy, nor does the healed area. Both are surrounded by mucous membrane showing acute gastritis." The patient made an uneventful recovery, was discharged on October 15, and has since remained well.

Comment

My reason for reporting this case is not that it is unusual, but because it caused me to change a premise which I had previously accepted—namely, that the association of histamine-fast achlorhydria with a radiologically demonstrated gastric ulcer means carcinoma of the stomach. Admittedly, a patient with this combination of findings must always be considered as a cancer suspect, but if there is other evidence suggesting that the lesion is benign—as there was in the case described—it may be the right policy to refrain from operating for a time, especially as rapid healing of the ulcer can be anticipated if in fact it is benign.

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