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NONSPECIFIC GRANULOMATOUS DISEASE OF THE STOMACH WITH HEMATEMESIS FOLLOWING RESERPINE THERAPY

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CHRONIC GRANULOMATOUS inflammation is a defence mechanism of the organism mediated through the reticuloendothelial system. Agents which are capable of provoking such reactions are numerous and include bacteria, viruses, foreign bodies and many others.[1] In recent years, various authors have described the occurrence of granulomatous lesions in association with hypersensitivity phenomenon.[2, 3] The typical granuloma is described as having a central area of epithelioid cells, with or without giant cells, surrounded by lymphocytes, plasmacytes and fibroblasts. Such reactions in the stomach are rare and we feel that such a case merits reporting.

The patient was a 59-year-old white French Canadian woman who was known to have suffered from essential hypertension for many years, with blood pressure readings ranging from 220/110 mm. Hg to 240/140 mm. Hg. Her physician prescribed reserpine in doses of 25 mg. four times daily. After four days of this treatment the patient had an attack of severe epigastric pain, acute in onset and associated with nausea, massive hematemesis and loss of consciousness. On arrival at the hospital her hemoglobin level was 6 g. per 100 ml. and her hematocrit was 18%. After having received 1000 c.c. of whole blood, the patient continued to vomit fresh blood and was prepared for emergency laparotomy and gastrectomy. This patient had never suffered symptoms referable to any disorder of the gastrointestinal tract prior to this event.

The surgical specimen received at the laboratory consisted of a stomach measuring 12 cm. along the greater curvature and 8 cm. along the lesser curvature. There was no sign of ulceration macroscopically. The mucosa of the antral area was edematous and spotted by fine petechiae. On macroscopic section the submucosa was thicker than normal owing to infiltration by blood and edema. Histologically, no mucosal ulceration was evident; however, a marked granulomatous inflammatory infiltration was seen between the mucosa and submucosa. This infiltration consisted of epithelioid cell masses with a central foci of giant cells, surrounded by lymphocytes, plasma cells and eosinophils (Figs. 1 and 2).

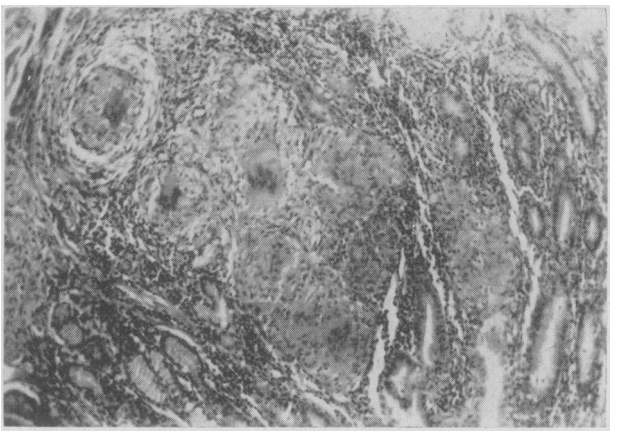

Fig. 1.—Granulomatous lesions in the gastric mucosa.

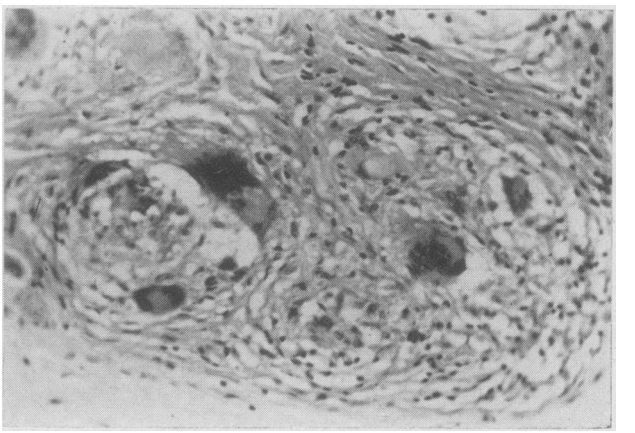

Fig. 2.—Granulomatous lesions in the gastric submucosa.

COMMENT

Other cases of hematemesis and melena following therapy with reserpine[4] have been reported in the literature. These have been ascribed to the inherent action of this drug on the gastrointestinal tract, i.e. to hypermotility and increased acidity due to hypersecretory action of the drug, with resulting reactivation of dormant peptic ulcers, acute peptic ulcer formation in a heretofore intact mucosa, or continuous mucosal weeping of blood, as this case would suggest.

Defects in blood coagulation have also been implicated as the cause of bleeding in such cases. However, Hollister[4] was unable to substantiate this hypothesis. In some receiving large doses of reserpine, a lowering of the platelet level has been found,[5] but in such cases one would anticipate manifestations of a systemic hemorrhagic diathesis rather than one localized to a particular organ.

We have not encountered in the literature any previous reports of granulomatous gastritis with hematemesis associated with the administration of Rauwolfia alkaloids. Clinically, symptoms referable to an entity termed "allergic gastritis" have been described.[2, 6] It would seem that in the case described in this report, this type of gastritis was a manifestation of hypersensitivity to this drug.

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