Case Reports

BENIGN ULCER OF THE GREATER GASTRIC CURVATURE COMPLICATING STEROID THERAPY

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THE use of steroids in the treatment of rheumatoid arthritis, ulcerative colitis, asthma and other conditions is attended by certain well-recognized complications. In particular, Bollet, Black and Bunim (1955) and Boland (1956) have drawn attention to the increased incidence of peptic ulceration in patients receiving steroid therapy, whilst Bickel (1955) and Muller (1955) have reported cases of severe hæmatemesis following this treatment.

Benign ulceration of the greater curvature of the stomach is considered by most authorities to be either non-existent or extremely rare. However, Feist and Littleton (1956) collected seventy-nine published cases of benign ulceration of the greater curvature, ten cases prior to 1928 and sixty-nine in the ensuing twenty-eight years. They added three cases of their own, and since then one case each has been reported by Sorenson (1956), Solosko, Killius, Rumbaugh and Skitarelic (1956), Masjuan and De Sagarminaga (1957), Kupec and Novak (1959) and Volpe (1959). This makes a total of eighty-seven cases published between 1914 and 1962, an average of about two cases per year. Considering how commonly gastric ulceration is seen in clinical practice, this is undoubtedly a small number. Nevertheless it indicates that benign ulceration of the greater curvature of the stomach must be regarded as a definite clinical entity.

A further case will now be described in which a benign peptic ulcer of the greater gastric curvature resulted in a severe hæmatemesis. The patient was receiving steroid therapy.

Case Report

A 35-year-old married woman was admitted to hospital on June 12, 1962, with a history of having vomited a large quantity of blood on three occasions that same day. She had suffered from indigestion in the past, but a barium meal three years previously had shown no peptic ulceration. For the past five years she had been taking 10 mg. of prednisolone daily for severe rheumatoid arthritis affecting the knees, wrists and elbows.

On admission she was pale and shocked, with a feeble pulse of 100 per minute and a systolic blood pressure of 70 mm. Hg. Her face was rather puffy, and she had severe rheumatoid arthritic deformities of the hands. Her abdomen was soft and there was no tenderness or palpable mass; rectal examination revealed a melæna stool. Her Hb was 35% (5g./100 ml.). She was given morphia gr. $\frac{1}{4}$ and 100 mg. cortisone by injection, and blood transfusion was commenced immediately. She vomited a further two pints of blood after admission,

and her systolic blood pressure improved to 90 mm. only after seven pints of blood had been given. Further blood examination showed normal bleeding and clotting times, normal platelets, and a mild fibrinogen defect. Two pints of fresh blood were obtained for her.

Course—Eighteen hours after admission her condition had improved sufficiently to allow operation, and a laparotomy through an upper midline incision was performed. This showed the stomach and intestines to be full of blood clot, and the presence of a large, clinically benign ulcer of the centre of the greater curvature of the stomach. A wedge resection of the portion of the greater curvature bearing the ulcer was performed, the blood clot being removed from the stomach at the same time. Cortisone was given pre- and post-operatively according to the regime recommended by De Mowbray (1957) who stressed how vital this was in emergency procedures on patients receiving steroid therapy.

For the first twenty-four hours after the operation the patient passed large melæna stools, and her systolic blood pressure remained at 90 mm. She oozed a great deal from her abdominal wound, but this was finally controlled by placing a strip of fibrin foam over the wound. More blood was given, and she received in all seventeen pints, two of which were fresh, and one pint of fibrinogen solution. Her blood pressure was maintained at 120 mm. after these measures, the blood fibrinogen level returned to normal, and the hæmoglobin was 70%.

Her post-operative course after this was uneventful, and she was able to take a light diet on the sixth post-operative day. After a week she had resumed her normal oral dose of 10 mg. prednisolone daily, and she was discharged from hospital on July 2, 1962. When seen two months later she was well and free from any symptoms.

Histology—An oval piece of gastric wall 7 x 4 cm. thick. There is a central roughly circular ulcer 3 x 2.6 cm. reaching the edge of the specimen at one point. The ulcer has a clearly defined sloping edge and a fairly smooth grey and red-brown floor. Projecting from the floor near one edge of the ulcer there is a dark red structure 0.6 x 0.5 x 0.4 cm. which consists of an eroded artery with the projecting end filled by red-brown thrombus. The base of the ulcer is about 0.5 cm. thick and is firm and grey but there is no induration of the surrounding tissues. The attached small piece of greater omentum contains one small grey lymph node.

For histological examination the whole of the ulcer with the immediately adjacent tissues was cut into twelve parallel slices about 3 mm. thick. The slices were blocked and a section examined from each block. The appearances are those of a chronic peptic ulcer with an eroded artery in the base. There is considerable fibrosis peripherally but the base is thinner in the centre where it penetrates into the fat of the subserosal tissues. There is no evidence of malignancy in the ulcer or the attached lymph node.

The photograph shows the specimen with a probe in the artery at the base of the ulcer.

FIG. 1.—Photograph of simple ulcer removed from greater curvature of the stomach, showing a probe in the eroded artery.

Comment

A total of eighty-eight cases of benign greater curve gastric ulcers have now been published. This is the first in which the patient was receiving steroid therapy. The increased incidence of peptic ulceration in patients receiving steroid therapy is well established and it is possible that with the increase in the therapeutic use of these substances, benign peptic ulcers of the greater curvature of the stomach may be seen more frequently.

Addendum

Since this paper was prepared, Low (1962) has described four patients in whom a greater curvature gastric ulcer was demonstrated radiologically whilst they were receiving steroid therapy. Further barium studies showed evidence of healing ulceration, but in no case was the lesion proved histologically.

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PULMONARY DETERIORATION IN WEGENER'S GRANULOMATOSIS DURING STEROID THERAPY

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THE treatment of Wegener's granulomatosis is unsatisfactory and the prognosis poor (Walton, 1958). Steroids have been recommended (Moore, Beard, Thoburn and Williams, 1951; Cutler, 1955), but their potential harmful effects must be considered. Although involvement of the respiratory tract is frequent and cavitation may occur, extensive cavitation is unusual. In the patient described, widespread pulmonary cavitation developed during

a course of steroid therapy while the patient remained very well generally, and it is likely that the pulmonary deterioration resulted, at least in part, from the administration of the prednisolone.

Case Report

Mrs. M. S., a housewife, aged 46 years, presented on 20.9.61 with a three-week history of pain over the maxillary sinuses, nasal congestion, earache, malaise and nocturnal sweats. In addition, she admitted to a