COMMENT

Case 1 is of interest in that it demonstrates the well-known radio-sensitivity of dysgerminomata. In spite of metastases when the patient was first seen, the disease was under control two-and-a-half years later.

Case 2 occurred in a patient comparatively young for this disease, though there have been several cases recorded in younger children. Russell (1938) reported a case in a child of 4 and McNally (1945) one in a child of 5. Novak's (1946) youngest patient was 6.

A few other extra-ovarian dysgerminomata have been reported, and, while the occurrence of the growth in such sites may be due to nests of embryonic tissue remaining behind during the course of development, it could also be explained by metastatic spread from a minute primary tumour. In Case 2 there did not seem to be any primary ovarian tumour.

The accepted treatment for localized dysgerminomata is excision of the affected tube and ovary, as recurrence in the other ovary is rare. Most authorities advise irradiation afterwards only if recurrence occurs, since it is obviously undesirable completely to destroy the patient's ovarian function, as the disease occurs in the young and the growth is usually of moderate malignancy only. The history of Case 2, however, suggests that this may not always be the wisest course. For those of adult age with hypoplasia genitalis there is obviously no objection to giving x-ray treatment post-operatively as a routine, nor is there when bilateral growths have been removed. Where metastases are present x-ray therapy gives comparatively good results, especially when one considers the poor prognosis of malignant disease arising in the young.

These cases were admitted under the care of Mr. Victor Riddell (who performed the operation on the first case) and Mr. M. F. Nicholls, and my thanks are due to them and to Mr. J. Jackson Richmond, to whom Case 1 was sent for x-ray treatment.

J. A. S. GREEN, F.R.C.S.

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Low Oesophageal Perforation at Gastroscopy

Low perforation of the oesophagus with the flexible gastro-scope is extremely rare (Schindler, 1950). The present case may therefore be of interest. It was the 320th of an otherwise uneventful series.

CASE REPORT

The patient was a wheelwright of 40 years, and of sthenic habitus. In about 1929 a gastro-enterostomy had been performed for pyloric stenosis. Since then he had been in good general health until six months before the gastroscopy, when high epigastric pain returned for two weeks. After a remission of four months a similar pain once more recurred, midline in site and passing through to the back. It was associated with epigastric fullness and belching half-way through a meal. The pain reached its maximum three hours after food; it also occurred nocturnally. There was no vomiting, no melaena, and no marked change in weight. His general condition called for no comment, his haemoglobin being 100% and a barium meal showing a well-functioning stoma and no evidence of ulceration. A stomal ulcer or persistent duodenal ulcer was, however, suspected.

Gastroscopy was attempted at 10.30 a.m. on April 13, 1949 (by C. F. J. C.), using a Hermon Taylor type with rubber

"finger-tip." Premedication consisted of "pethidine" 100 mg. with scopolamine 1/150 gr. (0.4 mg.) intramuscularly one hour beforehand; at 10 a.m. a Ryle's tube was passed and the patient given a tablet of "decicain" 50 mg. to suck. The instrument passed easily for over three-quarters of the distance, the patient showing no signs of distress. For about five minutes efforts were made by inflation, by flexion of the gastroscope, and by minor adjustments of the degree of extension of the head to obtain a field of vision, but none was forthcoming. During this period the patient, on being questioned, indicated that he was comfortable. The instrument was then withdrawn: there was a smear of blood on the rubber finger-tip.

At about noon the patient began to complain of increasing chest pain; by 2 p.m. he was very shocked and in great distress—sweating profusely, pale, restless, and with a thready pulse. His general and mental condition recalled the clinical picture of a recent coronary thrombosis. The pain appeared to be chiefly substernal, radiating to the back, up to the neck, and down to the left hypochondrium. There was marked epigastric tenderness and rigidity. In the left supraclavicular fossa surgical emphysema was visible and palpable, confirming our fears that instrumental perforation had taken place. Pressure over the sternum caused pain.

The abdominal pain with unyielding abdominal muscles suggested that the injury was a low one and probably close to the diaphragm. An x-ray film was taken in the erect posture, and no air could be seen under the cupulae, but the mediastinum was spongy with air bubbles, presumably pumped in at gastroscopy. A second film was taken after a small barium swallow (which enhanced the substernal pain): this showed an extravasation of the opaque medium just above the diaphragm into the mediastinal tissues on the right side. Operation revealed a ragged perforation in the gullet large enough to admit a fountain-pen, and about 1 in. from the diaphragm. The gullet wall at this point was thin and papery. There was no haematoma or other sign of injury, suggesting that the end of the gastroscope had temporarily stretched this point just on the diaphragmatic hiatus, piercing it, and had then been withdrawn. The tear was sutured, and the patient made a good recovery, but on the eighth day it became evident that a fistula had formed between gullet and operation track. The patient began to decline and died on the 26th day.

At necropsy the oesophagus showed a rent 1 in. (2.5 cm.) long on its antero-lateral aspect, at a point $\frac{1}{4}$ in. (1.9 cm.) above the diaphragm. The edges had separated and there was little sign of repair. On the anterior surface of the stomach 1 in. above the site of the previous gastro-jejunostomy was a recent perforation, $\frac{3}{4}$ in. across, of a chronic peptic ulcer. The splenic flexure of the colon, the tail of the pancreas, the hilum of the spleen, and the upper pole of the left kidney were tightly bound to one another and the stomach by dense fibrous tissue, in places almost 1 in. thick. This had abolished their mobility, and had bent and distorted the cardiac orifice of the stomach; which explained why the gastro-scope had been unable to pass beyond the oesophagus.

COMMENT

(1) Pathological immobility of the oesophagus or cardia in the region of the diaphragm adds to the inherent risks of gastroscopy, and, if possible, its presence and degree should be assessed before instrumentation. (2) A "barium swallow" is of assistance in locating the site of an oesophageal perforation. (3) It seems evident that the tear would not in this case have healed under a conservative regime.

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