The drug is worthy of a more complete investigation in anaesthesia.

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NEURINOMA OF THE STOMACH REMOVED BY TOTAL GASTRECTOMY

BY

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Neurogenic tumours of the stomach are infrequent, as is shown by the small number of cases reported in the available literature. Thus, Podlaha, Simon, and Uher (1934) mention only 2 out of 741 cases of benign tumours of the stomach. Minnes and Geschickter (1936) found that 10.9% of 931 benign tumours were of neurogenic origin. Judd and Hoerner (1936) observed one neurinoma in 50 cases. As regards the frequency of benign tumour of the stomach, Finesilver (1942) found 6 in a total of 43,200 x-ray examinations of the stomach carried out at a New York hospital. In Greece, Professor Courias (1946) reported one case of gastric schwannoma. Another case was operated upon by Dr. M. Maccas a year later. In the literature neurogenic tumours appear under different names, such as neurinoma, perineural fibroblastoma, schwannoma, neurilemmoma. It is not our intention to expound on the origin or the pathological classification of the neurogenic tumours.

The site of these tumours coincides with that of the malignant ones. Judd and Hoerner report that 66% developed in the antrum, 24% in the corpus, and 10% in the cardiac region. Their size varies from a chick-pea to a man's fist or more. Thus Sanguily and Blanco (1945) report a case of gastric schwannoma in which the tumour was 17 by 9 by 5 cm. in size and 580 g. in weight. Tierny (1934) reports a case in which a schwannoma was 250 g. in weight.

Symptoms depend on the size and position of the tumours. Small ones may remain latent, provided they are not ulcerated and not situated near the pylorus, in which case they are followed by symptoms of stenosis. The tension and torsion of pedunculated tumours situated in the pyloric region may possibly produce dilatation of the stomach accompanied by vomiting and visible peristalsis. These symptoms, however, may disappear when the tumour untwists. Larger tumours cause gastric disturbances—for example, pain after eating, vomiting, etc. These symptoms are usually more pronounced in the case of ulcerated tumours.

Mallory (1920) believes that ulceration is due to obstruction of the vessels, followed by necrosis of the mucosa. According to Judd and Hoerner, ulcerated tumours amount to 32%. West and Knox (1948) report that five out of six cases of gastric neurinoma were ulcerated. Another characteristic of these tumours is repeated bleeding. West and Knox report that four of their six cases had severe bleeding, and that in one case haemorrhage, though moderate, was continuous.

Anaemia is a characteristic symptom of neurogenic tumours; therefore Finesilver recommends an x-ray examination of the stomach of anaemic patients. According to Sanguily and Blanco, large tumours cause a weakening of the muscular tone of the stomach, resulting in slow evacuation of the contents, while small tumours stimulate peristalsis and raise the tone.

Diagnosis and Treatment

Diagnosis is based on clinical examination and laboratory research. In the case of small tumours, apart from occasional slight muscular tension at the epigastrium, no other symptoms are found. Tumours producing stenosis of the pylorus are followed by the corresponding symptoms. Radiological examination of neurogenic tumours may show a filling defect. The regular contours of the displaced mucosa are usually preserved. In many cases a niche due to central ulceration of the tumour is seen. The folds of the mucosa are normal. Peristalsis persists at the region of the filling defect, while spasm is lacking. These characteristics are useful in the differential diagnosis from malignant tumours and ulcers. Spasm exists only in the case of tumours situated near the pylorus. Routine laboratory examination of the gastric juice, stool, etc., may disclose the presence of blood. Blood examination often demonstrates secondary anaemia.

Finesilver points out that in the case of anaemic patients achlorhydria, and a filling defect with regular contours of the stomach at x-ray examination, probably signify the presence of a benign tumour.

The treatment for neurinoma is, of course, surgical, in order to prevent the danger of haemorrhage and of malignant change. The latter possibility is estimated by Paul and Chapman (1945) at 10%. Malignancy is usually represented by neurogenic sarcomas. In a case of suspected malignancy, partial or total gastrectomy is recommended. Tumours causing pyloric stenosis are also treated by gastrectomy. In the six cases of West and Knox, three partial gastrectomies and three local excisions were done. Should a benign neurogenic tumour be diagnosed before operation, local extirpation is recommended by most authors (Lockwood, 1932; Finesilver, 1942; Paul and Chapman, 1945; Sanguily and Blanco, 1945; West and Knox, 1948; Weeder and Stayman, 1950). Weeder and Stayman, however, point out the frequency of recurrence. The difficulty in determining the benign nature of the tumour, the tendency to recurrence, and the possibility of malignant change are in favour of partial gastrectomy.

The size and situation of the tumour are an important factor in determining the type and extent of gastrectomy. In our case the large area covered by the tumour, and its extension to the cardia of the stomach, forced us to perform a total gastrectomy. The progress of anaesthesia and re-animation has greatly lessened the risks of total gastrectomy and post-operative complications are usually successfully treated. It is recommended, however, that such patients be closely followed up.

Case Report

On March 7, 1952, a 40-year-old woman, complaining of weakness and vague abdominal discomfort, was admitted to the second surgical clinic of Athens University. The history dated back seven years. During this period she had suffered

from intermittent pains in the epigastrium, not aggravated by food. These complaints continued for approximately three years, after which a severe haematemesis occurred, presumably gastric in origin. Then and until May, 1951, her condition was satisfactory. At that time she started complaining of pain in the epigastrium, aggravated by food, and of acid eructations.

On examination the patient was pale and emaciated. The lungs, liver, heart, and kidneys were normal. A fixed hard mass the size of an egg was palpated in the epigastrium. Its upper end was covered by the left costal margin. The urine was normal. A blood count showed: red cells, 4,200,000; Hb, 84%; white cells, 6,800, with a normal differential count. The other laboratory tests were negative. X-ray examination of the stomach demonstrated a considerable niche, about 4-5 cm. wide, situated below the cardia on the lesser curvature. A clinical diagnosis of penetrative callous ulcer of the lesser curvature was made.

Operation.—On March 14, under thialbarbitone, nitrous oxide, and tubocurarine anaesthesia, a high median incision was made. At the lesser curvature of the stomach a tumour the size of a fist was found, extending from the cardia to the pylorus. As the diagnosis was malignant tumour, a total gastrectomy was performed. The spleen and the tail of the pancreas were also removed. The patient was returned to the ward in good condition. During the operation 500 ml. of blood and 500 g. of polyvinylpyrrolidone ("subtosan") were transfused.

The histological report stated: "Large neurinoma arising from the outer stomach wall of the lesser curvature. Ulceration at the middle of the tumour, about 3 cm. in diameter and 3 cm. deep. Chronic hypertrophic gastritis. No signs of malignancy were found. Diagnosis, neurinoma of the stomach."

The patient made an uneventful recovery and was discharged on April 3.

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Last month veterinary, public health, and laboratory experts met in Vienna to discuss measures for the control and eventual eradication of certain animal diseases which are transmissible to man. The conference, which was jointly sponsored by the United Nations Food and Agriculture Organization and the European Regional Office of the World Health Organization, was concerned with the zoonoses which are of special importance to European communities. Those discussed in most detail were rabies, brucellosis, bovine tuberculosis, leptospirosis, and Q fever. It was emphasized by speaker after speaker during the discussions that these diseases, although they differ in relative importance from country to country, are all of concern to large areas of Europe, where they not only cause widespread suffering and death among human beings but are also responsible for enormous losses in agriculture and animal husbandry. It is expected that as a result of the Vienna meeting a number of European countries now relatively free from rabies, for example, will enact suitable legislation to guard against the reintroduction of the disease to their territories.

PRIMARY GENERALIZED INFECTION CAUSED BY HERPES SIMPLEX VIRUS

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The condition described by Kaposi (1895) as a complication of eczema infantum and now called Kaposi's varicelliform eruption can be caused either by vaccinia or by herpes simplex virus. Thus Sommerville, Napier, and Dick (1951) have reported four cases proved to be caused by vaccinia virus, while herpes simplex virus has been isolated from clinically similar cases (Blattner *et al.*, 1944; Barton and Brunsting, 1944; Lynch *et al.*, 1945). The clinical disease resulting from infection with either of these viruses seems to be indistinguishable, and the name "Kaposi's varicelliform eruption" indicates a clinical picture which may be caused by at least two distinct viruses. Recently the terms "eczema vaccinatum" and "eczema herpeticum" have become current, and their use seems to be preferable.

In the case reported here the diagnosis was not difficult, the patient giving a history of eczema and of contact with a case of herpes simplex infection. The interest lies in the clear history of close contact being followed seven days later by a primary generalized infection with a skin eruption.

Case Report

A single girl aged 20 had suffered from attacks of asthma and eczema of the face, hands, and wrists since she was 3. Periodically the exacerbations of her skin condition had necessitated admission to hospital. When she was 7 years old her condition had been diagnosed in the skin department at St. Thomas's Hospital as falling into the "eczema-asthma group of diseases." On January 10, 1950, when she was free from asthma but had a mild chronic eczema of her face and hands, she came into direct contact, through kissing, with her boy friend, who had a labial cold sore. On January 17 she was seen by her general practitioner, who noted an urticarial type of rash on her face. Two days after this the rash seemed to have become secondarily infected, the girl had a sore throat, and white patches were present on her tonsils. Treatment with injections of procaine penicillin was begun at home.

When seen in consultation on January 21, 11 days after exposure, the patient appeared ill and was having pain and difficulty when swallowing. She stated that the illness had started with a few small blisters at the side of her mouth and a painful swelling beneath the chin. Her temperature was 101.6° F. (38.6° C.), and the skin showed a pustular eruption, most pronounced on the face and on the dorsum of the hands and wrists—the areas previously affected by eczema. The eruption was also present on the neck, the upper part of the chest, the inner aspects of the forearms, the thighs, and the natal cleft. The pustules were of uniform size and were umbilicated except where they had coalesced. The underlying skin was red, and on the face markedly oedematous. The mucous membrane of the lips was affected, and there appeared to be lesions on the tonsils.