It may be of interest to record that one medical officer, who zealously tests for bile pigments every day in these cases by the "froth" test, developed infective hepatitis. It was suggested that his fingers had become contaminated with the infected urine. Whether or not such was the mode of transmission of the virus of infective hepatitis in the case of this M.O., it is at least feasible and possible and is well worth bearing in mind.

ACKNOWLEDGMENTS

We wish to thank Colonel C. W. Nye, D.D.M.S., British Commonwealth Forces, Korea, and Colonel J. E. Snow, O.B.E., Commanding 29 General Hospital, for permission to forward these notes for publication; Lieut.-Colonel J. C. Watts, M.C., M.B., F.R.C.S.(Eng.), R.A.M.C., Captain R. Andrew, R.A.M.C., and Captain D. G. Miller, R.A.M.C., for their help with this case; Major J. P. Baird, M.B., M.R.C.P.(Edin. & Lond.), for the progress notes; Captain G. A. K. Missen, R.A.M.C., for the laboratory investigations; the nursing officers, Q.A.R.A.N.C., for their great nursing skill; the nursing orderlies, R.A.M.C., for their devotion; and No. 19136490 Pte. J. Downey, R.A.M.C., for typing these notes during his off-duty hours.

PRIMARY CARCINOMA OF THE STOMACH IN A WOMAN AGED TWENTY-FIVE

BY

Colonel L. R. S. MacFARLANE, O.B.E., M.D., D.P.H.
and
Captain M. A. PEYMAN, B.M., M.R.C.P.

Royal Army Medical Corps

The following case is of interest owing to the rarity of the condition at this age.

Mrs. S., wife of a soldier, was admitted to the Louise Margaret Hospital, Aldershot, on 6th March, 1951, with seven months' history of loss of weight accompanied by vomiting. Vomiting was almost daily in occurrence, large amounts of food, sometimes mixed with blood, being brought up. During this period she developed a sense of fullness in the epigastrium after meals, but it is interesting to note that at this stage she did not experience any true anorexia. There were no other relevant symptoms apart from amenorrhea for the previous eight months.
Clinical examination revealed an emaciated young woman with atrophied breasts and a fine growth of downy hair on the trunks and limbs. There was no lymphadenopathy and no pigmentation. The abdomen showed a smooth, firm, non-tender mass in the right epigastrium with waves of gastric peristalsis moving across from under the left costal margin towards the lump. No other lumps were palpable. The liver and spleen could not be felt. There was no abdominal tenderness and no ascites. Both rectal and vaginal examinations revealed no abnormalities. No clinical or radiological abnormalities were detected in the chest. The results of special investigations done were as follows: (1) Haemoglobin, 12.5 per cent.; R.B.C., 4,230,000 per cu. mm.; W.B.C., 6,000 per cu. mm. (polys., 75 per cent.; lymphs., 25 per cent.); E.S.R., 12 mm. in 1 hr. (2) Test meal: (a) fasting specimen showed free acid present; (b) after histamine, the curve was hypochlorhydric in type; (c) blood, but not lactic acid, was present in the juice; (3) W.R. and Kahn, negative; (4) barium meal revealed a constriction of the lower part of the body of the stomach with loss of normal rugal pattern. No ulceration or pyloric obstruction was detected. No examination for occult blood in the stools was done.

In view of the age of the patient, the diagnosis of carcinoma of the stomach was considered with some doubt. The possibility of sarcoma or tuberculosis of the stomach was entertained.

At laparotomy by Mr. P. J. M. Wright, F.R.C.S., on 25th March, 1951, the whole stomach was rigid and thickened by a growth; it had a leather-bottle appearance and was considered to be carcinomatous. The cæliac glands were enlarged. A total gastrectomy was performed together with removal of the cæliac glands, and an anastomosis between the abdominal oesophagus and jejunum was established. During the course of the operation the spleen was removed in order to secure a more satisfactory gland resection. The immediate post-operative progress was satisfactory. She left hospital one month after the operation free of symptoms.

Pathology.—Macroscopically, a leather-bottle stomach, completely infiltrated with growth and containing three ulcers along the lesser curvature. Sixteen lymph nodes, two of which were sectioned, were seen on the lesser curvature. Microscopically, a frozen section of lymph gland showed carcinoma simplex. Paraffin sections showed the stomach to be infiltrated by carcinoma simplex, most marked round the ulcers. Lymph channels were filled with tumour cells. Growth extended to the amputation lines. The ulcers were acute and showed no muscle destruction. Lymph nodes showed heavy infiltration by carcinoma simplex.

The patient was readmitted on 20th July, 1951, four months after operation, with a history of persistent vomiting and venous thrombosis for the previous two weeks. Clinical examination revealed considerable abdominal tenderness, although no lumps were palpable and no ascites was detected. The diagnosis of subacute intestinal obstruction, probably due to secondary deposits, was made. Although both vomiting and tenderness continued and she was rapidly losing weight, the patient was later discharged.
Primary Carcinoma of the Stomach

On 29th October, 1951, she was readmitted for relief of gross ascites. She was bedridden and markedly cachectic, and both legs had massive edema. Paracentesis abdominis was performed on 30th October, 1951, with much relief. She collapsed and died on 1st November, 1951.

POST-MORTEM REPORT

Body of an emaciated female, appearing considerably older than known age. Old scar on upper abdomen. Trocar and cannula stab on lower abdomen.

On opening the body the following were found: Chest: Fluid in pleural cavities. Abdomen: Full of darkish turbid fluid; oozing seen from transverse colon which was involved in a matted mass of glands and omentum. Numerous dense adhesions. Peritoneal surface of intestines red and flaky, more so in the lower abdomen, with typical bread-and-butter appearance of peritonitis. No signs that tapping was cause of injury to gut. Carcinomatous spread macroscopically noticeable in abdominal para-aortic glands. Brain not examined. No obvious metastases in bones. A splenunculus was present.


DISCUSSION

Primary carcinoma of the stomach is rare under the age of 30 (Willis, 1948), although cases have been proved at ages of 21, 18 and 9 (Kaufman, 1929) and 13, 14 and 15 by other writers. The mean age for carcinoma of the stomach, according to Willis, is 62.3, and, to Poscharisskey (Moscow) (1930), 54 years. The condition is more common in males, the Registrar-General’s figures for 1930-32 showing the ratio to be 2 : 1. Kaufman had 394 male and 277 female cases in his series, Poscharisskey 345 male cases and 155 female in his, and Willis 157 male to 70 female. Finally, invasion of the whole body of the stomach accounts for only 8 per cent. of all cases in the combined series of Willis (1948), Poscharisskey (1930) and Stewart (1931).

Our thanks are due to Major-General T. Menzies, C.B., O.B.E., M.D., K.H.P., D.D.M.S., Southern Command, for permission to publish this case.

REFERENCES

Stewart, M. J. (1931). Lancet, ii, 565, 617 and 669. (Quoted by Willis.)