Hg. There was no secretion in the breasts. The abdomen was slightly distended below the umbilicus but no mass was palpable. Tenderness and resistance were present in the lower abdomen, and it was not dull to percussion. On vaginal examination the cervix was slightly softened, but the body of the uterus was not clearly defined because of the abdominal resistance. An extremely tender indefinite mass was felt in the right fornix and she was very tender in the pouch of Douglas and experienced pain on movement of the cervix.

A provisional diagnosis of ruptured ectopic gestation or haemorrhage from a follicular or endometriotic cyst of the right ovary was made.

Blood was taken for cross-matching, and an intravenous drip of 1 pint (568 ml.) of dextran was started, followed by 3 pints (1,704 ml.) of blood.

At laparotomy about 1½ pints (852 ml.) of fluid blood and clots were removed from the peritoneal cavity. Both tubes and ovaries were normal. The uterus was enlarged by a subserous uterine fibroid about 2 by 2½ in. (5 by 6.2 cm.), situated on the right side of the anterior surface of the uterus just below the right cornu. On the surface of the fibroid were several thin-walled veins, one of which had ruptured and was bleeding freely. There were no adhesions around the uterus.

Myomectomy was performed and the uterine wall closed. The fibroid was very superficial in the uterine wall, and the resulting scar was only about 1 in. (2.5 cm.) long.

The patient had a post-operative respiratory infection, but otherwise made an uneventful recovery.

The pathologist reported a fibromyoma measuring 6 by 5 cm., containing haemorrhages. Microscopical examination revealed areas of oedema and thrombosis.

COMMENT

The cause of haemorrhage from a vein on the surface of a fibroid is not known, but Hasskarl (1949), in a review of the literature on 50 cases, states that most have followed a blow on the abdomen, a fall, or heavy work. His patient had been gardening and was menstruating when the pain started. McNeil (1952) was also of the opinion that sudden exertion might precipitate haemorrhage, especially during menstruation, when congestion might be present. His patient was menstruating and she had been hanging pictures when bleeding started. The fibroid was situated posteriorly, and had adhesions. Davies (1950) records two cases in which patients were sitting quietly at the time of intraperitoneal haemorrhage, though they were menstruating.

It seems to be more common for haemorrhage to occur when the fibroid is situated on the posterior wall of the uterus, for three of the above cases were thus situated, and so also was one of the two recorded by Shelfo (1939) and in each of those recorded by Schneider and Jemerin (1942), Woodruff (1948), and Sheehan (1951). However, fundal fibroids were present in Shelfo's other case and in those described by Bosch, Carter, and O'Grady (1950) and by Kaye and Ficarra (1950). One large fibroid on the anterior wall up to the umbilicus was reported by Li and Braden (1952); the woman was travelling by bus when her haemorrhage started. The case recorded here, however, had only a small fibroid situated on the anterior wall of the uterus, with no adhesions, and she was at rest and was not menstruating, so no precipitating factor seemed to be present, leaving the aetiology obscure. The age of the patients varied from 24 years (Goldstine, 1921) to 52 years (Shelfo, 1939).

In most recorded cases treatment has been by some type of hysterectomy, though simple ligation of the

bleeding vessel was reported in one case in Hasskarl's review. He recorded treatment by myomectomy in 12 cases, and to these may now be added Sheehan's case and the present one. Myomectomy seems the only justifiable treatment in young patients, particularly when few fibroids are present and they are readily accessible. Blood transfusion is, of course, required in the majority of patients, as haemorrhage is severe.

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Hypertrophic Osteoarthropathy Associated with Carcinoma of Stomach

The subject of hypertrophic osteoarthropathy was first brought to the attention of the medical world by Bamberger (1889) and Marie (1890). Suppurative pulmonary conditions such as bronchiectasis, empyema, lung abscess, and tuberculosis were regarded as the chief aetiological factors, but now, with the changing pattern of pulmonary diseases, bronchogenic carcinoma is gradually emerging as the principal primary disease responsible for arthropathy (Semple and McCluskie, 1955; Shapiro, 1956). Besides pulmonary and pleural diseases, hypertrophic arthropathy has been described, rarely, in congenital heart diseases, chronic gastro-intestinal diseases such as the sprue syndrome and ulcerative colitis, hepatic cirrhosis, and carcinoma of the nasopharynx. It is extremely rare to have osteoarthropathy associated with cancer of the oesophagus, and one such case has been described in which the malignant tumour developed as a complication of achalasia and was associated with marked features of hypertrophic osteoarthropathy due to pleural extension of the growth (Peyman, 1959). So far as we are aware, hypertrophic osteoarthropathy has not been described associated with carcinoma of stomach, and therefore the following case merits description.

CASE REPORT

A married labourer aged 46 was admitted to hospital in June, 1959, with the complaint of gradually progressive difficulty in swallowing, first with solids and later with fluids. He had lost a great deal of weight and was becoming progressively weak. There was no history of haematemesis. He also complained of a vague ill-defined pain in the lower chest on both sides. He was conscious of the fact that his wrists and ankles had greatly thickened during the previous six months and the finger-ends had become peculiar. His attention was directed to these changes by a constant dull ache in the wrist- and ankle-joints.

On examination he looked pale and ill-nourished. The face had an acromegaloid appearance with a large, shiny,

and bulbous nose. The nails and toes showed gross clubbing, and there was an obvious enlargement of wrists and ankles on both sides. The fingers were long and had a drumstick appearance. The nails were beaked and curved in all directions, exhibiting the so-called "watch-glass deformity." The spleen was enlarged to 4-5 cm. below the costal margin, and the liver by 1.5 cm. There was no palpable mass in the

abdomen or any lymph-node enlargement in the neck. No clinical abnormalities were found in the respiratory or cardiovascular system except a grade 2 haemic systolic murmur.

Investigations.

Hb, 10.5 g.; R.B.C., 3,500,000 / c.mm.; M.C.V., 85.7 cubic microns; M.C.H., 30 μ g.; M.C.H.C. 35%; W.B.C. 15,000, with 64% neutrophils. E.S.R., 84 mm. first hour, Westergren. The routine urine analysis and stool examination were within normal limits. Barium study of the gastro-intestinal tract revealed a large growth involving the lower end of the oesophagus and upper end of the stomach (Fig. 1). Radiological examination of the wrists and ankles showed typical changes of hypertrophic osteoarthropathy (Fig. 2). Radiography of the chest showed nothing abnormal. Liver-function tests: serum bilirubin, 1.5 mg.; thymol turbidity, 1 unit; thymol flocculation $\pm$; total proteins, 6.4 g.; albumin:globulin ratio 1.2:1. Liver biopsy revealed normal hepatic architecture. Splenoportal venography did not reveal any evidence of portal hypertension or of intrahepatic obstruction.

Owing to progressive dysphagia, preliminary gastrostomy was performed, followed by the excision of a large growth involving the upper third of the stomach and the lower 2½ in. (6.5 cm.) of the oesophagus. The histopathological examination of the growth confirmed it to be an adenocarcinoma of the stomach. The patient's condition deteriorated suddenly two days after the operation, and he died. Permission for necropsy was not granted.

FIG. 2.—Radiograph of the wrists, showing evidence of periostitis and arthropathy along the distal ends of radius and ulna.

COMMENT

Hammarsten and O'Leary (1957), reviewing 91 cases of hypertrophic osteoarthropathy described since 1938 in the English literature, found that 79 were associated with pulmonary neoplasm and only 12 with other diseases, including empyema, tuberculosis of bones, sprue, leukaemia, myxoedema, and lung abscess; one appeared as an independent phenomenon. Peyman (1959) also stressed the rarity of hypertrophic osteoarthropathy associated with diseases of the oesophagus, and in the case described by him arthropathy had evidently followed the pulmonary invasion of the growth. In our case there were well-marked changes of osteoarthropathy associated with carcinoma of the stomach. There was no radiological evidence of the extension of growth into the lungs or pleura, and no such involvement was detected at operation. The osteoarthropathy had developed simultaneously with the onset of dysphagia, and was responsible for the pain and limitation of movements.

The pathogenesis of osteoarthropathy remains obscure. It is generally agreed that the malignant growth produces some primary metabolic aberration which may be mediated by some humoral mechanism or by autonomic pulmonary systemic vascular reflex. Such a theory could best explain the rapid relief obtained in the symptoms of arthropathy even a few hours after the resection of the growth, and may also explain the therapeutic efficacy of ligation of the pulmonary artery, hilum denervation, vagus resection, or removal of the tumour. Such hypotheses have been advocated only in relation to the carcinoma of the bronchus, but the association of arthropathy with the malignancy elsewhere, as in the case under review, indicates that similar changes may occur, due to a local growth anywhere else.

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"We enjoy the artlessness of children. They endear themselves to us by being unaware of the humour of their words. But we do not look for the same quality in men of science, and the doctor who cannot understand why people are laughing at his words has lost some professional prestige, which is a necessary part of his stock-in-trade. 'The patient complains of tiredness after games of 8 years duration' was not a statement that would mislead many, 'but it made it harder thereafter to take that student seriously; which was a pity. So also for 'mucosal membrane in good shape,' '1 uncle paralysed like him on Father's side,' 'he was given a reading correction to wear for 6 months,' '6 children 1 still born. All married'—and so on. The quality of naivety, present in these and many other examples, implies a lack of self-criticism: the writers could not detach themselves from their words, so as to hear themselves speak, or read with objectivity what they had written. And criticism—not least of oneself—is the basis of reason and science." (Dr. Geoffrey Rose, "A Learned Profession?", *St. Mary's Hospital Gazette*, June, 1960.)