THE ABDOMINAL CRISES OF PERNICIOUS ANAEMIA.

BY

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MUCH attention has been directed to the simulation of the gastric crises of tabes by perforated gastric ulcer. At the present time the mistake of operating upon a patient with a tabetic gastric crisis is rare. During six years' continuous association with emergency surgery in widely separated clinics I have not come across a single example of this error, which has been eliminated by the routine practice of testing the reaction of the pupil and for the presence of the knee-jerk in every suspected case of gastroduodenal perforation.

The object of this note is to call attention to another medical condition which simulates very closely an acute abdominal catastrophe.

The later stages of pernicious anaemia are occasionally complicated with what may be termed abdominal crises. They resemble so closely one of the recognized acute abdominal conditions, such as perforated gastric ulcer or acute pancreatitis, that when confronted with one for the first time even the most conscientious surgeon may be trapped. The ghastly pallor, especially in artificial light, is mistaken for that of profound shock or internal haemorrhage, and when this picture is combined with a history of sudden agonizing abdominal pain and vomiting, and is accompanied by abdominal rigidity, the difficulty in diagnosis is occasionally almost insurmountable, unless, of course, we are in possession of the knowledge that the patient is the subject of an aplastic anaemia. The explanation of the sudden attacks of abdominal pain is fairly clear. During the katabolism of large numbers of erythrocytes the liver is called upon to excrete a prodigious amount of bile pigments. These pigments are too concentrated to be held in solution, and are precipitated in the form of "bile mud," which gives rise to severe biliary colic. Furthermore, the subjects of these crises, being worn out by a long illness and an impoverished blood supply, react very strongly to the painful stimuli. This theory is supported by the following cases, in one of which I performed laparotomy. The gall bladder was enormously distended, and when opened was found to contain thick, black "biliary mud."

CASE I.

A Jew, aged 55, was admitted to the London Hospital on October 17th, 1922, at 2.30 a.m., as an "acute abdomen." He spoke no English, and the history was translated by a relative, who said that the patient was seized with sudden very acute abdominal pain seven hours previously. The pain was at first in the epigastrium, but later became general. He had vomited several times. As far as could be gathered the patient had previously been quite well, except for indigestion. The patient was exceedingly pale, and obviously in great pain. The abdomen did not move freely with respiration, and there was board-like general rigidity and tenderness, especially marked in the epigastrium and right hypochondrium. The liver, spleen, and kidneys could not be felt. The rectal examination and examination of urine were negative. The heart and lungs were clear. A diagnosis of perforated gastric ulcer was made, and laparotomy performed. The only abnormality found was a very distended gall bladder. By cholecystotomy a large quantity of biliary mud was evacuated. Three days later the patient became comatose, and died shortly afterwards. It was at this time ascertained that he had been in hospital one year previously with advanced pernicious anaemia.

CASE II.

A woman, aged 58, was admitted to Dudley Road Hospital on January 25th, 1926, with a history extending over two years of frequent attacks of acute abdominal pain. The pain was always most marked in the left hypochondrium and passed through to the back. The present attack began four hours before admission, and was considerably more severe than any of the previous ones; the patient had vomited. On examination in artificial light she appeared to be somewhat jaundiced. The tongue showed evidence of superficial glossitis. There was general abdominal tenderness and slight upper abdominal rigidity. The spleen and liver were enlarged, and the latter distinctly tender. A diagnosis of gall

stone colic was made. Next morning it was noticed that the patient was not jaundiced in the ordinary meaning of the term, but was of a bright lemon tinge. A colour index was immediately taken, and gave typical reading for pernicious anaemia. She was transferred to the medical side, where this diagnosis was confirmed.

THE TREATMENT OF VARICOSE VEINS BY INJECTION.

BY

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THE necessity for an efficient non-surgical treatment of varicose veins is emphasized by the ever-increasing number of advertisements of quack remedies in the press. The standard works on surgery affirm that, short of operation, the only treatment lies in mechanical support. As the result of two years' experience in the production of thrombosis in varicose veins, I am convinced that this line of treatment is superior to excision.

The procedure originally suggested by Genevrier has been followed throughout. The solution used is composed of quinine hydrochloride 4 grams, urethane 2 grams, in distilled water 30 c.cm. A pneumatic tourniquet is applied with moderate pressure above the line of vein to be dealt with and 1/4 c.cm. of the solution injected into the lumen through a fine hypodermic needle. Perivascular administration is usually unnecessary; it is not, however, contraindicated, as the resultant inflammation is not severe, provided only a few minims are introduced outside the vein. The puncture is sealed with collodion, which may be removed the same night, and the injection repeated about two inches further up the vein. It is wiser not to introduce more than 2 c.cm. at one sitting.

The amount of pain accompanying the artificial thrombosis varies greatly in different patients, but is never sufficient to render walking impossible, and in the vast majority of cases little or no discomfort is experienced. All my patients have come to my consulting room and returned home in their usual manner. Several of them played tennis on the following day.

With very large varices the same areas may have to be injected two or three times. As a rule, however, one injection is sufficient for each two or three inches of vein treated. Of the 88 cases dealt with all have been completely successful, and no recurrences have as yet been observed. Initial swelling of the vein was not uncommon, but this soon subsided, and after a few weeks it may be felt as a nodular cord, causing no bulging on the surface of the leg unless it be situated over the subcutaneous surface of the tibia.

The relief of the lancinating pains or bursting sensations associated with the presence of varicose veins is very striking, and patches of eczema and ulcers often heal completely.

The cases treated were not selected. Many of them occurred in fat, middle-aged women, the veins extending up both legs into the thighs; yet they responded to treatment as readily as young adults. One lady was purposely avoiding a second pregnancy on account of her previous unhappy experience with varicose veins. Artificial thrombosis was produced, and she has since had a child with no mishap or recurrence of venous trouble. When commencing this treatment it is natural to be anxious lest embolism occur. The thrombosis appears, however, to be very firm and adherent, and has never given rise to embolic disturbances in injections which I have given—numbering more than a thousand.

The disability produced by varicose veins in this country is enormous. Thousands of otherwise healthy men were unable to take active part in the war on this account. Hundreds of men and women have to give up work to which they have been trained because it entails much standing. Furthermore, modern fashion decrees that the feminine leg shall be covered by thin silk only. The unsightly bulging of varices in this locality occasions the patient much distress. The advantages of this treatment over operation are obvious. Neither work nor pleasure is interfered with; neither preparation nor anaesthetic is required. If the treatment is carried out carefully and with reasonable dexterity no harmful effects will follow.