citrate—administered by mouth was carried out among patients heavily infected with *T. trichiura*. No therapeutic effect was observed.

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Medical Memoranda

Torsion of the Gall-bladder

About a hundred cases of acute torsion of the gall-bladder have been reported in the literature since Wendel's case (1898). From the Scandinavian countries single cases have been reported by Hansen (1920), Arnesen (1929), Koch (1943), Ekdahl (1951), and Berg (1955). It is rare for one surgeon to see more than one of these cases during his lifetime; yet four surgeons have seen two cases and one surgeon has seen three. The latter is of the opinion that a correct pre-operative diagnosis is possible. To make the gall-bladder capable of undergoing torsion it must either have a complete mesentery or its body be free, the mesentery only fixing its neck. This state of affairs is brought about either as a congenital anomaly or as an acquired relaxation, atrophy of the connective tissue permitting increased ptosis of the gall-bladder (Maingot, 1948).

Detailed reviews of published cases have been made by Short and Paul (1934) and Bean and Symond (1953). A further case is here presented.

CASE REPORT

A 70-year-old woman was admitted to Surgical Department A of Frederiksberg Hospital at 9.30 p.m. on July 4, 1953, with a twelve-hours history of acute diffuse pain in the abdomen, later localized to the right iliac fossa. The pain was of a constant character with colicky exacerbations, and she vomited several times. There had been a normal motion twelve hours before, but no flatus had been passed since.

On examination she was noted to be a rather fat ill-looking old lady obviously in pain. Her tongue was dry, temperature 99.6° F. (37.5° C.), pulse 100, and regular. The abdomen was large with a slightly prominent right side; there was no abdominal distension, but a tender mass was felt in the right iliac fossa in the area between the iliac crest and a scar from a right pararectal incision (appendicectomy). Pelvic and rectal examination gave no information. With a provisional diagnosis of intestinal obstruction, possibly caused by a caecal tumour or a caecal torsion, a straight x-ray film of the abdomen was taken, followed by a radiograph of the colon after a barium enema. No signs of obstruction were found, but it was noted that the hepatic flexure of the colon was placed lower than usual. With the application of local heat, and fasting, the patient was observed for some hours. The temperature rose to 101.2° F. (38.4° C.), and the abdomen became slightly distended. It was noted that the tender mass in the right iliac fossa shifted somewhat in position and size. A renewed straight x-ray film of the abdomen showed some air in the small bowel but no fluid levels. At this juncture the possibility of an acute obstructive cholecystitis was discussed, but as no definite diagnosis had been reached it was decided to operate.

A laparotomy was performed through a right transrectal incision medial to the old scar. On opening the peritoneum

a moderate amount of fluid was noted, and some adhesions had to be cut. A heavy, reddish-black gangrenous gall-bladder 20 cm. long presented itself in the wound, being suspended from the liver by a small partial mesentery. It had undergone a 360-degrees anticlockwise torsion. After untwisting and isolation and ligation of the cystic duct and artery, the gall-bladder was easily removed. The wound was closed in layers with a drainage tube to the gall-bladder bed. The patient made an uneventful recovery.

The removed gall-bladder contained numerous small gall-stones, and microscopical examination showed a haemorrhagic necrosis of its wall.

COMMENT

If an old woman is seized by a sudden colicky pain of persisting character in the middle of the abdomen, right hypochondrium, or right iliac fossa, a diagnosis of gall-bladder torsion may be considered. In some cases there is a distinct zone of maximal tenderness over a small area, as pointed out by Case (1951) and Bell (1955). Furthermore, if a tender rounded tumour is found, varying in size during observation, it should be possible to arrive at the correct pre-operative diagnosis—namely, torsion of the gall-bladder. The treatment is early cholecystectomy.

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Combined Congenital Malformations of Oesophagus and Heart

It is well known that more than one congenital malformation may occur in the same patient, and that certain malformations are commonly associated together. A better knowledge of such definite combinations might help both in diagnosis and in the understanding of the causative factors. The following case had congenital malformations affecting both the oesophagus and the heart.

CASE REPORT

A 19-year-old primipara, with a normal history of pregnancy when seen at the antenatal clinic, was delivered of a severely anoxic male infant on December 21, 1954. Labour was normal, but hydramnios was present. The infant weighed 5 lb. 6 oz. (2,450 g.). In spite of repeated careful aspiration there was a continuous and copious discharge of mucus from the mouth and nose. At six hours, examination showed a deeply cyanosed infant with rattling respiration, from whose nose and mouth clear mucus was still discharging. Loud rhonchi were heard over the chest, and a loud systolic murmur maximal at the apex of the heart. An unsuccessful attempt was made to pass a tube into the stomach, and the infant died, anoxic and very deeply cyanosed, 63 hours after birth. A post-mortem radiograph showed that the upper oesophageal segment ended as a blind pouch, while the lower oesophageal segment communicated at its upper end with the bifurcation of the trachea.

Extract from Necropsy Report.—The oesophagus ended in a blind sac-like enlargement 3 cm. from its proximal end. At the point of its bifurcation the trachea communicated with the distal portion of the oesophagus, which had a diameter of 6 mm. and ended normally in the stomach. The heart was enlarged, the right ventricle being dilated and hypertrophied. The left ventricle was smaller, with thinner walls than usual. The aorta and pulmonary artery

sprang from a common trunk arising from the right ventricle, with four valves at its cardiac orifice, some of which were thicker and harder than normal. At 1.5 cm. from the cardiac origin of the trunk the right and left pulmonary arteries arose, while the aorta continued to form the arch from which rose the great arteries and also the ductus arteriosus linking the aorta with the right pulmonary artery. There was an opening, 8 mm. in diameter, in the membranous upper portion of the interventricular septum with a thickened whitish margin. The left atrioventricular ostium and bicuspid valve were corresponding. The other internal organs showed no congenital malformations. Histologically, there was perivascular fibrosis of the myocardial vessels and coronary atheroma. There was also fibrosis of the valves of the common arterial trunk.

COMMENT

Until recently there was no way of saving the lives of infants with congenital oesophageal atresia. But now a considerable number of successful operations on such cases have been reported. This has led to considerable optimism. However, the prognosis remains hopeless when there is an associated grave abnormality of the heart.

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Clinical Trial of Glycyrrhetic Acid Ointment

Glycyrrhetic acid is obtained from liquorice. There is a structural similarity between glycyrrhetic acid and cortisone, and it has been shown that liquorice extracts contain substances with deoxycortone-like activity (Molhuysen *et al.*, 1950).

Adamson and Tillman (1955) used 2% glycyrrhetic acid ointment in a variety of skin conditions, mostly eczematous, in which good results had previously been claimed for hydrocortisone. They suggested that their results were encouraging enough to indicate that glycyrrhetic acid ointment should be given a further trial.

We have carried out such a trial as follows.

METHOD

2% glycyrrhetic acid ointment and a control containing only the ointment base were used. The preparations were supplied in tubes labelled ointment A and ointment B, and it was not known until the conclusion of the trial which preparation contained the active ingredient. Two groups of patients with lesions, the majority eczematous, which might be expected to respond to local hydrocortisone were treated.

Ointment A		Ointment B	
Glycyrrhetic acid	2%	Wool fat	20%
Wool fat	20%	Liquid paraffin	25%
Liquid paraffin	25%	White soft	ad 100%
White soft	ad 100%		

Paired Comparison Group.—Twenty patients with symmetrical lesions were treated with ointment A on one side, ointment B on the other, the majority as in-patients. Precautions were taken to ensure that neither patient nor observer knew which preparation was applied to which side. The ointment was rubbed in night and morning, and the affected areas were protected with dressings. Treatment was continued for an average of seven days, and the results were assessed on the basis of objective changes in the lesions, as unchanged, improved, or deteriorated (Table I). With one exception, symmetrical lesions in individual patients behaved identically with both preparations.

TABLE I.—Paired Comparison Group (20 Cases)

Ointment	Unchanged	Improved	Deteriorated
A	7	7	6
B	8	6	6

Alternate Case Group.—Ointment A and ointment B were supplied alternately to 30 patients, who were instructed to rub in the ointment gently night and morning. After the results of this initial treatment had been assessed at the end of seven days or earlier, treatment was to be continued with the other preparation for a similar period, so that the effects of both ointments could be observed in the same individual. As the trial proceeded it was found that no fewer than 12 patients had become unsuitable for treatment with the second preparation because of deterioration in the lesions contraindicating further greasy applications, because the lesions had healed completely, or because they were unable to remain under observation. Of the 18 patients given the second treatment 3 did not report for final assessment. Thus results of treatment with both ointments are available in 15 patients (Table II) and with one ointment only in a further 15 patients (Table II). There appears to be no significant difference between the effects of ointment A and ointment B.

TABLE II.—Alternate Case Group

Ointment	Unchanged	Improved	Deteriorated
Results with both A and B (15 Cases)			
A	4	10	1
B	3	9	3
Results with either A or B (15 Cases)			
A	3	2	3
B	2	1	4

COMMENT

In neither group was any significant difference apparent between the effect of 2% glycyrrhetic acid ointment and the control base. To maintain uniformity with trials proceeding elsewhere, a greasy ointment base was used which we consider generally unsuitable for the treatment of eczematous conditions.

A substantial proportion of the lesions were intolerant of the treatment applied. This is not surprising, as the application of greasy remedies to eczematous lesions in an acute or subacute phase is usually contraindicated. Hydrocortisone is a striking exception, in that even acute weeping lesions are often improved by this remedy when applied in a greasy base. In no instance was such improvement produced by the glycyrrhetic acid preparation, which further suggests that in its present crude form this substance has little or no hydrocortisone-like effect.

These findings are at variance with the impression of Adamson and Tillman (1955) that glycyrrhetic acid preparations have a hydrocortisone-like effect. It may be that these conflicting results depend on some active constituent of liquorice which is present in varying amounts in different samples of glycyrrhetic acid as at present commercially obtainable.

Further work is necessary to elucidate the nature and therapeutic effect of the fractions of crude liquorice extracts and commercial glycyrrhetic acid. Meanwhile it appears to us premature to suggest that glycyrrhetic acid ointment is a satisfactory substitute for hydrocortisone.

We are indebted to Dr. E. V. B. Morton, of Boots Pure Drug Co. Ltd., for much helpful advice and for arranging supplies of the preparations used, and to Dr. Pamela Horne and the nursing staff for their help in carrying out the trial.

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