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
<i>Results with both A and B (15 Cases)</i>			
A	4	10	1
B	3	9	3
<i>Results with either A or B (15 Cases)</i>			
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.

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