A PILOT TRIAL OF AN ANTIHISTAMINE, METHDILAZINE, IN MEASLES

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MEASLES IS A WIDESPREAD EPIDEMIC ILLNESS affecting nearly every inhabitant of the British Isles at some time during their lives. While, in the majority of cases, complete recovery takes place, there is always a small proportion which does not have such a happy outcome.

In the absence of effective preventative measures to date (although the development of a vaccine is progressing apace), any treatment which will favourably influence the course of the illness is to the patient's benefit.

Zollo *et al.* (1953) described the treatment of 85 cases of measles with suppositories containing amidopyrine, calcium, and an antihistamine drug. They claimed a rapid fall in temperature, early clearing of the rash and a decrease in the severity and the number of complications.

Piovella and Piovella (1949) also stated that antihistamines caused a rapid fall in temperature and disappearance of the exanthem of measles.

Dubow (1961) compared a linctus containing choline salicylate, chlorpheniramine maleate and L-phenylephrine hydrochloride with a linctus containing dihydrocodeinone bitartrate in 44 cases of measles. Taking special note of the catarrhal complaints, the linctus containing the antihistamine was found to be the more effective in relieving symptoms.

In this country, Easton and McLean (1962) treated 55 cases of measles with promethazine and showed marked improvement in malaise, photophobia and pruritus as compared with 32 control cases.

It was, therefore, thought justifiable to conduct a double-blind trial of a newer antihistamine, methdilazine (" dilosyn " B.D.H.), comparing its action with an inert placebo.

Methdilazine, as well as having antihistaminic properties (Crawford

and Grogan, 1960; Spoto and Sieker, 1960; Miller, 1962; Rawitz and Merksamer, 1962; and General Practitioner Research Group, 1962), is also a potent antipruritic (Friend, 1961; Smith and Curwen, 1961; Lubowe, 1962; and Frohman, 1962) and has been shown by Howell and Winston-Salem (1960) to relieve many of the symptoms of chicken-pox which is also a virus exanthematous epidemic disease.

Materials and methods

Preparations for the trial were made well in advance of the expected 1962/1963 epidemic. The cases were drawn from a mixed general practice in north-west London consisting of 4,000 patients.

As each case of measles presented, it was seen and carefully documented. As soon as the diagnosis was made (i.e. the appearance of the typical exanthem or enanthem) the child was given a numbered bottle of medicine with the instructions that one teaspoon should be given night and morning. Half the bottles contained 4 mg. methdilazine per teaspoon and the other half contained an inert placebo. Neither patient nor doctor knew what each bottle contained.

The child's temperature was recorded daily and a note was made of when the rash cleared and when the cough subsided. The duration of the malaise and catarrhal symptoms (i.e. coryza, photophobia, conjunctival injection, etc.) was recorded; also, any complications were noted.

Results

TABLE I

CASES TREATED WITH ACTIVE AND INERT SYRUP

	Active syrup	*Inert syrup*
Number of cases ..	16	14
Males	8	7
Females	8	7
Average age ..	5 years 6 months	4 years 9 months

Complications

Case 5—Inert group—male aged 8 years. On the fourth day after the rash appeared, there were signs of bronchitis. This responded to penicillin 'V' 125 mg. q.d.s. and the chest was clear in two days. However, there was a troublesome cough which lasted for three months. Chest x-ray was normal, throat swab grew commensals only and the Heaf test was negative.

Case 7—Active group—female aged 1 year 3 months. On the third day after the rash appeared, there were signs of left otitis media which responded rapidly

to penicillin 'V' 100 mg. q.d.s. A throat swab grew a non-haemolytic streptococcus only.

Case 12—Inert group—female aged 5 years 6 months. On the third day after the rash appeared, there were signs of left otitis media. This responded within three days to penicillin 'V' 125 mg. q.d.s. Nose and throat swabs grew commensals only.

Case 16—Inert group—male aged 4 years 2 months. Previous history of suppurating otitis media, so as prophylaxis, Mist. Sulphadimid. pro. Inf. *B.N.F.* 7½ gr. q.d.s. was given. Nevertheless, he developed signs of left lower lobe pneumonia on the sixth day after the rash appeared. The diagnosis was confirmed by a chest x-ray. This infection responded to tetracycline 100 mg. q.d.s. in five days. Nose and throat swabs grews commensals only and the Heaf test was negative.

Case 22—Active group—male aged 5 years 6 months. Severe vomiting occurred at the height of the pyrexia. This was treated with fluids only and lasted two days in all.

TABLE II

RESULTS OF TREATMENT WITH ACTIVE AND INERT SYRUP

Duration of: (days)	*Active syrup*	*Inert syrup*	*Standard error of difference*	*Difference*
Rash	4.9	5.1	0.27	0.2 (< 2X s.e.d.)
Pyrexia after onset of rash	2.0	2.0	0.41	0.0 (< 2X s.e.d.)
Malaise ..	7.1	4.9	1.32	2.2 (< 2X s.e.d.)
Cough ..	8.6	9.2	1.23	0.6 (< 2X s.e.d.)

Conclusions

From table I, it can be seen that the average ages of the two groups (active syrup and inert syrup) are very close (5 years 6 months and 4 years 9 months respectively) and there are equal numbers of males and females in each group. The ages ranged from 1 year 2 months to 13 years 3 months.

Table II shows that the duration of the rash in the active group was 4.9 days, whereas in the inert group it was 5.1 days. The duration of the pyrexia after the onset of the rash in both groups was 2.0 days. The total duration of malaise in the active group was 7.1 days, whereas in the inert group it was 4.9 days. There was no significant difference in the duration of the cough—8.6 and 9.2 days respectively. Pruritus occurred in four cases having active syrup and in two cases having inert syrup, but it was never a troublesome

symptom. Photophobia and coryza also were transient and mild. No side-effects of the drug were reported during the trial.

While the above results are not conclusive, there is a very strong indication that methdilazine did not beneficially affect the course of 16 cases of measles as compared with 14 cases treated with an inert placebo. It was, therefore, decided not to continue the experiment any further as previous workers' experiences were not substantiated.

Summary

In a pilot trial involving 30 cases of measles, methdilazine was shown to have no beneficial effect upon the course of the illness.

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PRE-DELIVERY ATARALGESIA

A Comparative Clinical Study of Promazine Hydrochloride in Labour

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LABOUR IN MOST WOMEN IS attended by pain and fear. The severity and effect of this upon the delivery process varies widely from patient to patient and even in the same patient during different labours. Apart from the various complicating factors which are known to produce distress, such as disordered uterine action and posterior position of the occiput, the emotional make-up of the patient, her understanding of delivery and her upbringing all contribute in

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