

Parental treatment of children with sore throat

PHILIP W. ROSS, M.D., M.I.BIOL.

Department of Bacteriology, The Medical School, Edinburgh University

IN Edinburgh during 1966–68 a study was conducted on various aspects of sore throat in children. Part of this study was carried out with the help of five practitioners in a large group practice in the Muirhouse–Pilton area of the city. Many aspects of sore throat, including aetiology, incidence, diagnosis and treatment, were examined.

As the research progressed new problems presented themselves and were studied. One of these was to assess the extent to which children were given some kind of medication at home prior to consulting the family doctor. Several practitioners suspected that home medication for sore throat was widely prevalent because the signs and symptoms of this condition seemed to be much less impressive in recent years than in former. Some practitioners were also concerned about the possibilities of children being given remaining amounts of medicines such as antibiotics, originally prescribed for some other member of the family but not completely taken, because of the possible masking of signs and symptoms of some serious infection that this could cause. Quite apart from this danger, concern about the indiscriminate use of antibiotics at home was based on the fact that an infection such as a sore throat may be viral in origin in which case antibiotics would not only be ineffective but could even be dangerous, by altering the nature of the normal flora, with the attendant risk of superinfection. Also, even in the case of a streptococcal sore throat penicillin treatment would be ineffective if a penicillinase-producing staphylococcus were present in the throat (Frank and Miller 1962, Kundsinn and Miller 1964). There was clearly interest by practitioners in the whole question of home medication in cases of sore throat and because no figures on the incidence of this were available it was decided to conduct a local study.

Methods

When children up to the age of 15 presented with signs and symptoms of throat infection to any of the five family doctors in the Muirhouse practice who agreed to participate in this study, they were examined, swabbed and treated. In addition, a proforma giving details of home treatment was completed for each child, and along with the swab, was sent to the University Department of Bacteriology.

During the 31 months of the study 525 index cases, involving 474 children, were examined and recorded. Children were considered to be new index cases each time a fresh episode occurred, provided that an interval of 10 days had elapsed since the previous one (Badger *et al.* 1953). Of the 474 children, 427 had one episode, 43 two episodes and four three episodes.

Results

Three hundred and twenty-seven children (62.3 per cent) received some sort of medication before consulting their doctor and the types of this are seen in table I. The majority of children (94 per cent) had been given aspirin or some equivalent analgesic drug. Five had had 'antiseptic' or antibiotic substances; four had had 'antiseptic' preparations: Savlon, Tetraset, Bradasol or Strepsil lozenges and the fifth had had

TABLE I
TYPES OF HOME TREATMENT

	Number	Percent
Aspirin (or equivalent) ..	309	94
Antiseptic or antibiotic tablets ..	5	2
Other	13	4
Total ..	327	

tablets (probably penicillin) which had been prescribed for an older sister some months earlier. Most of the remaining 13 children had been given cough mixture or had had their chests rubbed with unspecified ointment.

Discussion

Many more children than expected had been given some sort of home treatment before being taken to the doctor and it could be said that all these 327 children were home treatment failures. What is not known is the percentage of children, who, having been treated successfully by home remedies, never appear in the doctor's surgery.

Despite the high figure for home medication it is reassuring to note that 94 per cent of the children had only been given aspirin or equivalent preparations and that only one child in the whole series had been given an antibiotic.

In a comparison of the average period of time taken from the commencement of signs and symptoms of sore throat to consultation with the doctor, usually one to two days, no difference was found between the group which had received home treatment and the group which had not. It would appear that although children are given some medication at the start of a sore throat it is perhaps 'an appeal to magic' because they are taken along to the doctor just as soon as their untreated friends. The incidence of beta-haemolytic streptococci was much the same in both groups and this indicates that the particular microbial aetiology is not the deciding factor in children getting treatment, one type of organism causing a more severe clinical picture than another, but rather the attitudes of the parents.

From this study it would appear that if home treatment is to be given to children with sore throat it is most likely to be with analgesic preparations and that no problem exists regarding the indiscriminate use of the remains of previous antibiotic prescriptions.

Summary

Of 525 children presenting to five general practitioners in a large Edinburgh group practice, 327 (62 per cent) had had some form of treatment at home prior to consultation with the doctor. Ninety-four per cent of these had had some form of analgesic and only one child had been given antibiotic tablets which had been left over from a previous prescription. It is concluded that indiscriminate antibiotic usage in the home does not present a serious problem.

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