Drug Treatment of Disease**TREATMENT OF CORYZA**

BY

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Though there is still no cure for the common cold, something can be done to mitigate its evils. But the important advances in chemotherapy during the present century have produced no effective drug to shorten the course of this widespread affliction. In 1810 Dr. E. Bullman, in his *Medical Directory or Family Physician*, advised his lay readers that "the cure consists as much in regimen as in medicine," a statement which applies equally to-day. Indeed, the best advice is that patients with coryza should confine themselves to their own homes, remaining in an even temperature, though not necessarily in bed, until the symptoms have abated. Unfortunately this course, which would shorten the patient's distress and prevent widespread dissemination of winter colds, is seldom followed. Most patients, following the example rather than the advice of their doctor, continue to regard the common cold as a trivial annoyance rather than an illness. Thus they remain at work, with an air of martyrdom, spreading the germs of disease among their fellow men.

Many remedies have been advocated for the cure of colds, and the medical profession has not been blameless in introducing and popularizing some of these alleged cures. But in the treatment of an illness which naturally lasts only three or four days it is easy to attribute curative properties to any drug—especially if introduced on the second or third day. Moreover, in giving treatment for a disease of such short duration it is exceedingly difficult to assess the results of new drugs. Too seldom are such remedies put to statistical trial. It can be safely said, however, that no remedy put to scientific test has proved its worth in shortening the course of the illness. Treatment remains largely symptomatic.

Vaccines

Ideally the aim should be to prevent infectious diseases by protective inoculation and by public health measures. Coryza is a virus disease, and no effective vaccine has so far been introduced for its prevention. Anticatarrrhal vaccines have been popular for many years. These are bacterial vaccines, prepared from organisms known to invade or inhabit the upper respiratory tract. They are valueless in preventing colds: their action, if any, is in preventing secondary bacterial infection. In particular, they may be helpful in the management of patients prone to severe bronchitis after colds. In these patients anticatarrrhal vaccine is worth trying, but the results are so variable as to cast doubt on its true value. The vaccine is given in three doses, 0.25 ml., 0.5 ml., and 1 ml., at weekly intervals. It is best given in October, but, since it is claimed that immunity lasts only for three months, a second course should be given in January. Vaccines for oral administration have been introduced, but there is no evidence of their efficiency.

Imbibing large quantities of various vitamins has been advocated for the prevention of winter infections. True as it may be that infections are common in cases of

vitamin deficiency, there is no evidence that oil-soluble vitamins or vitamin C protects individuals of normal dietary habits from the common cold. Avoiding contact with infection is impracticable in modern civilization, where crowded buses and trains, communal life in factories, and visits to the cinema are all part of the daily routine.

Antibiotics and Sulphonamides

It is not unnatural that antibiotics have been used in the treatment of the common cold, since they have a powerful effect in suppressing secondary infection. It has even been asserted that broad-spectrum antibiotics should be given as a routine in the treatment of coryza. Not only are the claims that antibiotics shorten the course of the illness without foundation, but there are serious objections to their use. There is the risk of toxic effects from the antibiotics, such as drug sensitization, gastro-intestinal upsets, and even, in the case of chloramphenicol, possibly fatal agranulocytosis. There is also the risk of encouraging overwhelming respiratory, general, or gastro-intestinal infection with drug-resistant staphylococci. Although numerically slight, these grave risks must be weighed against the trivial and benign course of the disease. A final objection to the routine use of antibiotics is the expense to the nation.

If antibiotics are to be used for the control of secondary infection they should be withheld, as a rule, until the signs of secondary infection appear. But there are circumstances in which antibiotics justify their use in the early stages of coryza. Patients with chronic or recurrent infection of sinuses, and children with recent or recurrent middle-ear infection, should receive antibacterial treatment early. Since the invading organisms are usually pneumococci or streptococci, either a sulphonamide or penicillin should be adequate. Sulphadimidine, 1 g. three times daily in tablet form for adults, or in a palatable suspension for children (mist. sulphadimidin. pro. inf. B.P.C. contains approximately 0.5 g. in each dose), should be given for four or five days. If penicillin is given, oral administration is sufficient, and is certainly more acceptable to the patient and more convenient to the busy family doctor than repeated injections. Phenoxymethylpenicillin (penicillin V) is probably the most reliable oral preparation, 60 mg. being equivalent to about 100,000 units of penicillin. The tablets should be given half an hour before meals and at not longer than four-hourly intervals, but doubling the last dose at night avoids interrupting sleep. The dose for adults is 125 to 250 mg. four-hourly, for children 62.5 to 125 mg., and for infants 30 to 62.5 mg.

In patients with bronchiectasis or with chronic bronchitis and respiratory impairment, antibiotics will often prevent severe and prolonged episodes of respiratory infection and lessen the risk of further damage to the lung. Here, a four- or five-day course

of one of the tetracyclines is probably the treatment of choice, since *Haemophilus influenzae* often predominates in producing secondary infection. Tetracycline itself, chlortetracycline, or oxytetracycline are the most suitable drugs; the dose in each case being 250 mg. four times daily.

Analgesics

Aspirin is an excellent drug for relieving malaise and reducing fever. The indiscriminate swallowing of whole aspirin tablets is to be deprecated, since it is a cause of severe gastro-intestinal bleeding. Soluble aspirin is preferable, one to three 5-gr. (320-mg.) tablets being dissolved in water before swallowing. This dose may be repeated six-hourly. Aspirin, combined with Dover's powder (tab. acid. acetylsalicyl. et opii co. *B.N.F.*) is a more powerful diaphoretic and analgesic than aspirin alone. Up to four tablets may be taken at a time. There is no experimental evidence that alcohol is beneficial, but tradition justifies the use of hot whisky and lemon, if so desired, as a "night cap."

Inhalations

Steam inhalations are of inestimable value in relieving nasal and laryngeal congestion in the early stages of a cold. Benzoin and menthol, either alone or in combination, are the most popular preparations. Their action is partly due to the inhalation of steam, and they should not be used immediately before going into the cold air. Proprietary pocket inhalers containing aromatic vasoconstrictors have achieved some popularity. Amphetamine is no longer used in inhalers, since it was found that many patients became addicted to its use. Inhalers containing propylhexedrine are available. This drug has a less vasoconstricting action than amphetamine, but it is not habit-forming. Apart from convenience, these pocket inhalers have no advantages. Their use should be discouraged on the grounds that a patient whose cold is severe enough to require repeated inhalations is ill enough to be at home having adequate treatment and infectious enough to stay away from work.

Nasal drops and sprays should be used with care. In no circumstances should oily solutions be administered. Not only do these preparations impede the helpful ciliary action of the nasal mucosa, but there is a risk of their being inhaled into the lungs, where they may cause extensive and severe lipid pneumonia. Drops containing sulphonamide and antibiotics are of limited value and open to the dangers referred to earlier. After using nasal sprays, patients tend to clear the nose by vigorous blowing, but this may help to spread infection into the paranasal sinuses and middle ear.

Vasoconstriction by means of a 1% solution of ephedrine in saline (narist. ephed. *B.N.F.*) alleviates nasal congestion and is the simplest and safest of the many popular preparations. A simple alkaline douche such as solv. nasal. alk. *B.N.F.* is helpful in clearing the nose at a later stage; again, the patients should be warned against enthusiastic nose-blowing after use.

Gargles

Gargles have been used extensively in the past for the treatment of the pharyngitis accompanying upper respiratory infections. Although they are possibly beneficial when the tonsils are enlarged, it is difficult to see how they can benefit the patient with pharyngitis, since the fluid does not get beyond the anterior faucial

pillars during the act of gargling. To be effective, the preparation should be swallowed after gargling. Garg. ferr. perchlor. *B.N.F.* or glycer. thymol. co. *B.N.F.* can be used in this way. If relief from painful swallowing is needed, lozenges are probably preferable. Troch. benzocain. co. *B.N.F.*, containing benzocaine and menthol, acts as a pleasant local anaesthetic, but has the slight disadvantage of anaesthetizing the tongue and spoiling taste at the same time. Incorporating antibiotics in gargles and lozenges is valueless and possibly dangerous in the treatment of patients with coryza.

Antihistamines

Antihistaminic drugs have been widely advocated in the treatment of coryza, but without justification. Although highly effective in controlling rhinorrhoea in hay fever and, to a less extent, in perennial vasomotor rhinitis, antihistaminics are useless in the treatment of the common cold.

General Aims

Until successful prophylactic measures are discovered, the common winter upper respiratory infection will continue to be a burden to the community and the practitioner. At present there are no effective means of control and treatment is largely palliative. The doctor's aims are to ease the patient's symptoms, to avoid accepting the diagnosis of coryza too readily in febrile illness in the winter, to try to persuade the patient to keep the infection to himself, to give effective antibiotic treatment in occasional cases, and finally to refrain from exposing the patient to risks of treatment which might be more formidable than the disease.

OBSTETRIC PROBLEMS OF THE GENERAL PRACTITIONER AS SEEN BY A CONSULTANT

BY

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The problems of the general practitioner in domiciliary obstetrics are quite different from those of his specialist colleague working in hospital. For example, a sharp ante-partum haemorrhage or a severe toxæmia may tax the skill and resource of the obstetrician in an institution, but to the general practitioner such a case poses no real problem; the disposal of the patient is obvious—after appropriate first-aid treatment she must be transferred to hospital.

The real problems of the general practitioner obstetrician are shown by the three sets of circumstances in which he calls in a consultant to see the patient outside hospital. First, the specialist may be summoned to help in an acute emergency, most often in labour, such as delay in the second or third stage. Secondly, the family doctor may call in the consultant as a reinforcement, where he himself has strongly advised the patient to enter hospital but she has refused. In three cases in this series the patient rejected such advice from both general practitioner and specialist. Thirdly, and by far most commonly in my experience, the consultant is