

CONSERVATIVE THERAPY OF NASAL ALLERGY

R. Voorhorst, M.D.

The therapy of vasomotor rhinitis is difficult, because for such a purpose a multi-disciplinary therapeutical approach is required. In fact it is necessary for the nasal doctor either to employ to the full his capacities for reflection and patience (in addition to his surgical skill), or to cooperate very closely with a doctor who is more of a specialist in the internal treatment of allergic diseases than he is. Though we can find these difficulties in the therapy of many other diseases, they are particularly characteristic for a certain group of diseases, which have, like vasomotor rhinitis, a pathogenesis which is either obscure or complex. For these reasons the non-surgical therapy has not only aspects which can be designated scientific, but also some others, belonging more to the "healing art" and these cannot be learnt so easily.

In what follows I shall restrict myself to the relatively small part of the conservative therapy of vasomotor rhinitis which is called scientific. The effect of a drug which is administered, depends on two factors:

- 1) Did the doctor have an adequate conception of the pathogenesis of the disease?
- 2) Did he know the character of the drug's action and its side-effects well enough?

Once these prerequisites are fulfilled the conservative therapy is not difficult and follows simple rules. Disagreement in a therapeutical respect therefore can nearly always be reduced to differences of opinion concerning the pathogenesis of the disease, or to differences of insight into the character of the action of a certain drug. The present paper therefore requires the evidence given in my previous paper over the pathogenesis of vasomotor rhinitis.

1. The therapy of the **atopic factor** as such is not a major problem. After having obtained a good idea of the important allergens to which the patient is allergic and to which he is exposed, we can try to **diminish this exposure**. Sometimes this is not very difficult, for instance in those cases where "occasional allergens" are involved, such as in atopy to danders of animals. Sometimes the exposure can be diminished to a certain degree, for instance in house-dust atopy. A dry and dust-proof dwelling is then recommended. An exposure to pollens however cannot easily be reduced, without intervening too much into patients' private lives.

A second therapeutic measure is the **antagonizing of histamine** which is released in huge quantities during the atopic reaction. If the patient can endure the modern antihistamines without too severe side-effects, especially that of drowsiness, the treatment with these antihistamines is a nice procedure in those cases of atopy which do not last very long. This is the case with many patients who have pollinosis. In the Netherlands many hayfever patients have complaints only for a few weeks and these people are helped a good deal by a certain amount of antihistamines during these periods; desensitization is for these patients a too cumbersome measure. Antihistamines are also very useful for those patients who are desensitized, but who have

nevertheless still a certain amount of complaints during periods of massive exposure. The same holds true in other cases of atopy, such as in house-dust atopy, though the circumstances are generally not as clear as in pollinosis.

Corticoids are seldom necessary in cases of pure atopy. If they are required for antagonizing atopic reactions, the doctor must administer rather high doses (e.g. 20—25 mgr. prednisone daily) in the first period, and it is also advisable to combine these with antihistamines in order to keep the quantity of corticoids as low, and their duration as short, as possible.

Desensitization procedures are very simple, provided we are well enough informed on the kinds and on the degrees of atopic sensitization of the patient. The greatest difficulty however is to get extracts which are therapeutic and at the same time reliable. Another difficulty is to convince the patients that they should continue these desensitization treatments for sufficiently long periods, i.e. mostly for many years. At the moment in the Netherlands we are not yet quite sure whether the repository treatment with emulsions of allergen extracts together with certain kinds of paraffin oil is so reliable and so without side effects, that it can be recommended for routine purposes on a large scale.

2. Though there is little difference of opinion concerning the measures which must be taken to counteract atopic vasomotor rhinitis, this is not the case with **non-atopic vasomotor rhinitis** because of the existing disagreement as to its pathogenesis. Most doctors restrict themselves only to certain symptomatic measures such as:

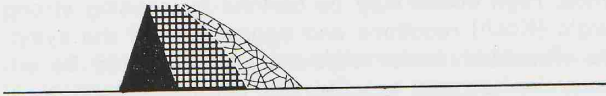
Decongestive nasal drops. We prefer in this respect **Otrivin**, which does not work very strongly, though for a rather long time (about 6 hours), and which has therefore little rebound effect afterwards. Some doctors give **ephedrin** or analogous drugs orally, but we are convinced that these drugs are of much more value in asthma than in vasomotor rhinitis. It is possible that histamine itself may be liberated also in some patients with non-atopic rhinitis or that a mechanism of histamine-hyperreactivity is present in vasomotor rhinitis, which we know to exist in asthma. In any case **antihistamines** have in a number of patients with non-atopic rhinitis a good effect in suppressing the symptoms, and I think that this cannot always be ascribed to a non-specific (sedative) effect of the antihistamines. A medicament which can be of much use in this connection is **Brontine**, an antihistamine recently developed by a research team of a Dutch firm (Brocapharm). This substance has as much antihistaminic as anticholinergic potency and can especially be recommended in cases with abundant watery discharge (see: Voorhorst 1962).

Some other therapeutic procedures, such as the administration of **antibiotics, corticoids** and **vaccination procedures** are, according to my opinion, the most important measures in the causal therapy of this kind of vasomotor rhinitis.

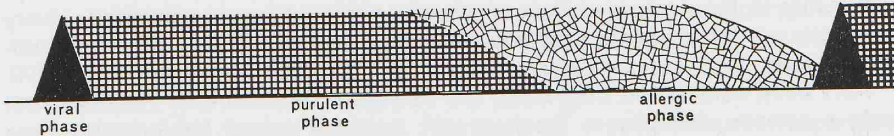
Non-atopic vasomotor rhinitis can be seen as a "slow-motion picture" of what happens also in normal people after a common cold. After a viral infection which lasts only for a few days, normal people get a purulent phase, of which a secondary bacterial factor is the most important one.

Via a phase of production of some muco-purulent or mucous discharge,

„COMMON COLD“ IN NORMAL PEOPLE



„COMMON COLD“ IN VASOMOTOR RHINITIS



which can be considered as a (delayed type) allergic final phase, the normal circumstances are restored within a week or so. This is not the case in non-atopic vasomotor rhinitis. After a first period of viral rhinitis, which lasts as long as in normal people, a bacterial phase follows, in which we can most frequently find pneumococci and haemophilus influenzae. This bacterial phase varies in non-atopic rhinitis from some days to some weeks or even months.

In this phase an antibiotic therapy is first necessary. This must start immediately after the purulent discharge has been observed, and must be continued so long until all signs of purulence have disappeared. In practice we give penicilline, chloramphenicol, Rovamycine, tetracycline, etc. in doses not too high. As these patients are rather susceptible to gastro-intestinal disturbances a dose of 1 gr. chloramphenicol daily is recommended. We continue this treatment for one, two, three weeks or even longer, until the infection factor is stamped out altogether. This does not mean that all bacteria are exterminated; the contrary is the case. Antibiotics have no influence at all on slightly-metabolizing bacteria. These almost dormant bacteria are, I think, the main cause of the delayed type allergic third phase.

We can treat this phase either symptomatically, or more causally with small amounts of corticoids, which are specifically active against the phenomena of delayed type allergy. This allergic third phase in patients with non-atopic vasomotor rhinitis may last very long, weeks, months or even years, so that in many cases minimal and gradually decreasing doses are required for a long time. The corticoids suppress the symptoms of delayed type allergy very well and I suppose that suppression of the symptoms of delayed type allergy is necessary for a slow diminishing of this delayed type allergy to a certain extent over some months. And now the danger is that this process is interrupted by a new viral infection and this is followed by a new purulent phase, with a reactivation of the delayed type allergy as a final result.

The most essential thing in non-atopic vasomotor rhinitis is, I think, the prevention, and if this is not possible, the rapid and adequate treatment of each purulent phase. In this respect we cannot at the moment expect much from anti-viral vaccinations. A polyvalent vaccine of all viruses which can prevent an attack of viral rhinitis is not yet at our disposal. We do

possess however vaccines of the killed bacteria which are the cause of the second bacterial phase, but the administration of these bacterial vaccines must be done with prudence. High doses may be harmful by causing strong general delayed type allergic (Koch) reactions and aggravation of the symptoms of vasomotor rhinitis. Provided these reactions are prevented by administering very small doses, the bacterial vaccines are certainly of additional help in the treatment of non-atopic vasomotor rhinitis, but only in the third place. They are of no use in those cases in which either the purulence or a very strong delayed type allergic factor is the most important clinical symptom. Only in the periods during which these clinical symptoms are not very manifest, are the bacterial vaccines of value in preventing new bacterial purulent phases.

As I have said at the beginning, the treatment of vasomotor rhinitis is not only a science, but also a "healing art", and this cannot be learnt but can only be practised. In relation to vasomotor rhinitis the "healing artist" must balance in his mind all the causal factors, not only the atopic, infectious and delayed type allergic ones, but also the less specific irritating factors, the influence of the general bodily constitution and possibly certain psychic circumstances. And after this has been done he must find, each moment anew, the most appropriate therapeutic "answer" to the whole complex of causal and aggravating factors.

Finally, though this is not my subject, I would like to emphasize that nasal surgery can play a major rôle in this therapeutic process by correcting or restoring the nasal anatomy or by eradicating some co-existing foci.

LE THÉRAPIE CONSERVATIVE DE L'ALLERGIE NASALE

La nature du traitement conservatoire de la rhinite vaso-motrice dépendra des facteurs qui sont à l'origine de cette dernière.

1) Les mesures recommandées à l'égard des **facteurs atopiques** consistent dans la réduction de l'exposition à l'allergène, dans l'administration d'antihistaminiques, de corticoïdes (rarement) et dans un traitement de désensibilisation.

2) Pour la **rhinite vaso-motrice non-atopique**, indépendamment d'un traitement symptomatique à l'aide de gouttes nasales (Otrivin) et d'antihistaminiques (par, exemple, la Brontine), il est recommandé de recourir à un traitement plus **causal** comportant l'administration d'antibiotiques au cours de la phase purulente et de petites doses décroissantes de corticoïdes au cours de la phase allergique.

Les vaccinations à l'aide de vaccins tués (*haemophilus influenzae*, pneumocoques et staphylocoques) peuvent également avoir des effets très favorables à la condition que les quantités de bactéries administrées par injection ne soient pas trop élevées.

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Dr R. Voorhorst, Lector in Allergology,
Academisch Ziekenhuis, Leiden, Netherlands.