A New Nasal Decongestant

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During the months of June to October, 1955 a field trial was carried out by several general practitioners to assess the efficacy of a new nasal decongestant.

Tetrahydrozoline Hydrochloride [2-(1, 2, 3, 4-tetrahydro-1-naphthyl) imidazoline hydrochloride] is marketed in this country under the name of Tyzanol in the form of a 1% aqueous solution.

A derivative of imidazoline, it has a sympathomimetic action and it is claimed that while it has a marked decongestant effect on the nasal mucosa it does not, in the strength used clinically, inhibit ciliary action nor is there any rebound phenomenon. Furthermore, the side effects are said to be infrequent and mild.

To test the truth of these claims several doctors engaged in general practice were asked to use Tyzanol in the form of nasal drops for the treatment of common nasal and para-nasal conditions, such as common cold, para-nasal sinusitis, allergic rhinitis and "post-nasal drip". It was appreciated that under the conditions of C O N D I T I O N

Common Cold

Acute Sinusitis or
Otitis Media (9 cases)

Chronic Sinusitis

Allergic Rhinitis or Hay Fever

Chronic Rhinitis and/or
Post Nasal Drip

TOTAL

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the trial exact diagnosis could not be expected and that overlapping of categories was bound to occur. The addition of the rather vague diagnosis of "post-nasal drip" was meant to include cases of chronic nasal discharge where a firm diagnosis had not been made. In some cases chronic sinusitis might be the causal factor.

The 274 patients included in the trial were given bottles of the solution with droppers and instructions for use. A record card was kept for each patient comprising personal details, diagnosis and duration of complaint, number of days and frequency of application, whether used in the erect or supine position and what side effects were produced. At the conclusion of the course of treatment the doctor concerned classified the result as good, fair or poor and added his remarks about side effects and patients' reactions.

Finally, the records were collected and analysed and the following table of results prepared:

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CASES	\mathbf{R} \mathbf{E}	SUL	T S
	Good	Fair	Poor
64	60	4	
	(93.5)	(6.5)	
39	26	10	3
	(66.5)	(25.5)	(8.0)
15	7	3	5
	(46.5)	(20)	(33.5)
95	72	18	5
	(76)	(19)	(5)
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61	36	19	6
	(59)	(31)	(10)
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274	201	54	19
100	73.5	19.5	7.0

Note: - Figures in-brackets give approximate percentages.

PERCENT

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Certain tentative conclusions may be drawn from the above figures and the reports of individual doctors.

- 1. The general efficacy of Tyzanol* in relieving nasal congestion is indicated by the 73.5% of "good" results obtained. Relief of nocturnal "stuffiness" was especially noted, as was the prolonged effect (4-6 hrs.) of the day-time applications.
- In the common cold, 93.5% of cases showed good results and several reports were received of the rapid abortion of colds especially in their early stages.
- 3. In acute sinusitis (30 cases) and otitis media (9 cases) rapid drainage with relief of symptoms was frequently remarked.
- 4. In allergic rhinitis and/or hay fever it was noted that the initially excellent response tended to lessen as treatment continued.
- 5. As might have been expected, there were more failures in chronic sinusitis, and post-nasal drip than in the acute conditions.
- 6. No significant differences in the action of the preparation or of the incidence of side effects were noted which could be attributed to age, method of instil-

lation (erect or supine) or length of treatment.

SIDE EFFECTS

These occurred in 11% c	n patients
and were:—	
Nausea	10
Nasal and post-nasal irritation	10
Headache	5
Somnolence	
Dizziness	2
Tachycardia	1
Increase of congestion	r

In no case were they severe enough to require cessation of treatment. Fourteen occurred in the allergic rhinitis group, 8 in the chronic rhinitis group and 3 in each of the others.

Rebound congestion was particularly enquired for and only in one doubtful instance was increased congestion complained of.

To sum up — it would appear that Tyzanol is an effective and safe preparation for use in congestive conditions of the nasal mucosa and that its use facilitates drainage in infections of the middle ear and sinuses.



^{*} Registered trade mark of Pfizer Ltd., Folkestone.