

PHARMACOLOGY-III
UNIT-I
TOPIC: Nasal decongestants



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NASAL DECONGESTANTS

These are α_2 agonists which on topical application as dilute solution (0.05-0.1%) produce local vasoconstriction. The imidazoline compounds naphazoline, xylometazoline and oxymetazoline are relatively selective α_2 agonists (like clonidine).

They have a longer duration of action (12 hours) than ephedrine. After-congestion is claimed to be less than that with ephedrine or phenylephrine. They may cause initial stinging sensation (especially naphazoline). Regular use of these agents for long periods should be avoided because mucosal ciliary function is impaired: atrophic rhinitis and anosmia can occur due to persistent vasoconstriction.

They can be absorbed from the nose and produce systemic effects-CNS depression and rise in BP.

These drugs should be used cautiously in hypertensives and in those receiving MAO inhibitors.

Pseudophedrine

- A stereoisomer of ephedrine; causes vasoconstriction, especially in mucosae and skin, but has fewer CNS and cardiac effects and is a poor bronchodilator (little α_2 agonistic activity).
- It has been used orally as a decongestant of upper respiratory tract, nose and Eustachian tubes