Topical nasal decongestants: use up to 10 days may not cause rhinitis medicamentosa

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THE PROBLEM: The common cold affects almost every human being at least once per year. Nasal congestion is one of the most common symptoms of this condition and relief is sought from oral or topical decongestants. I was taught not to use topical decongestants for more than three days due to concerns about rebound rhinitis known as Rhinitis Medicamentosa, but have had patients who have used topical decongestants for years with no such problem. Most of the literature about rhinitis medicamentosa comes from ENT clinics where patients have been using topical decongestants for many years. This Cochrane Corner includes the Cochrane review[1] on nasal decongestants for the common cold (now removed from the library, but available from Bruce Arroll via email) and a randomised controlled trial by Eccles (2008).[2]

More recently is the concern regarding illicit use of oral pseudoephedrine as a source of methamphetamine. Of medical concern may be the risk of increasing blood pressure and one oral decongestant phenylpropanolamine is no longer used. One case control study compared the use of cold preparations containing phenylpropanolamine in 702 people with a history of haemorrhagic stroke versus 1376 control people with no history of stroke.[3] The study found a non-significant trend towards increased haemorrhagic stroke with phenylpropanolamine (RR 1.50, 95% CI 0.85 to 2.65).

CLINICAL BOTTOM LINE. The Cochrane review recommended that topical nasal decongestants seem to have an effect at least after the first dose. The paper by Eccles found a similar benefit which persisted up to 10 days with three times daily use. The Cochrane review recommended not using topical decongestants long-term and also cautioned about using it in children as rhinitis medicamentosa has been reported after a single dose in children. The Eccles paper found no such problem in adults with three times daily use for 10 days.

Topical nasal decongestants for the common cold

	Success	Evidence	Harms
Topical decongestants for nasal obstruction due to the common cold	NNT of about 10 for improvement in symptoms	Cochrane review[1] RCT[2]	Possible risk of rebound congestion with long-term use and in children

NNT = numbers needed to treat

References

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2. Eccles R, Eriksson M, Garreffa S, Chen SC. The nasal decongestant effect of xylometazoline in the common cold. Am J Rhinol. 2008;22:491–496.
3. Keman WN et al. Phenylpropanolamine and the risk of hemorrhagic stroke. N Engl J Med. 2000;343:1826–32.

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