



Nose Plug

Karen Binkley, MD, FRCPC

- ✓ Jeremy is a 55-year-old laboratory technician who complains of **severe nasal congestion**. His symptoms started six months prior with an apparent upper respiratory tract infection; however, the nasal congestion did not resolve when other symptoms of the upper respiratory tract infection abated.

History:

- ✓ Jeremy's history reveals the following:
 - There is **significant nasal blockage, which sometimes interferes with his sleep**
 - There is little nasal discharge, post-nasal drip, itching or sneezing
 - There is no ocular irritation
 - Anosmia is absent
 - There is **no history of asthma** and there are no ongoing chest or lower respiratory tract symptoms
- ✓ Jeremy has two dogs at home, but he has never noticed any symptoms after handling the dogs and his symptoms did not resolve while he was away from his dogs on a two-week vacation to Mexico three months earlier.
- ✓ He **occasionally uses latex gloves in the laboratory**, but Jeremy has never noticed a rash on his hands after wearing them. Nor has he ever noticed any itching or swelling of his mouth or lips after visiting the dentist.

Medical history:

- ✓ Jeremy's history reveals:
 - He can blow up balloons without experiencing any swelling of his lips
 - He had an appendectomy two years earlier without any allergic reaction during the surgery
 - **He has no food allergies** and can eat bananas, avocados and kiwi without any oropharyngeal pruritis
 - Jeremy has never had eczema and is not aware of any family history of atopy
 - A systems review is otherwise unremarkable
- ✓ Past history includes only sports injuries.
- ✓ Jeremy **takes no regular medications**, but admits to taking over-the-counter nasal decongestants "only when my nose gets really plugged up."

Medical presentation:

- ✓ Pertinent physical findings include swollen, erythematous nasal turbinates. The septum is midline and there is no evidence of perforation. There is no conjunctival injection and his chest is clear.

Notes on Jeremy

Age: 55

Presentation:

- Complains of severe nasal congestion
- Symptoms began six months prior with an upper respiratory tract infection

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What do you suspect?

- ✓ Rhinitis medicamentosa (RM).
- ✓ With more specific questioning, Jeremy admits that he uses topical nasal decongestant sprays at least three times or four times a day. He started using these six months ago with his upper respiratory tract infection.
- ✓ RM develops after several days of regular use of nasal decongestants. Once the topical decongestant spray wears off, rebound vasodilation occurs and this results in worsening nasal congestion. The affected individual will typically use additional doses of the topical decongestant for symptom relief, establishing a vicious cycle wherein the regular use of topical decongestant is required for ongoing symptom relief, which contributes to the rebound vasodilation and increasing nasal congestion.
- ✓ In this case, allergy skin prick tests are negative, supporting a non-allergic explanation for his symptoms.

Diagnosis:
Rhinitis medicamentosa

Management:

- ✓ Immediate discontinuation of the topical nasal decongestant is advised and Jeremy is warned that his nasal congestion will temporarily get worse for a week or two. Oral decongestants may help minimize nasal congestion during the one week to two week period following the withdrawal of topical decongestants. One can experience anxiety, insomnia and elevated BP as normal vasomotor tone is re-established.
- ✓ Conservative measures to help minimize symptoms during the rebound period include the use of nasal saline sprays, sleeping in a cool room (to help maximize any vasoconstriction) and sleeping with the head elevated (to minimize venous pooling in the nasal mucosa).
- ✓ Jeremy is instructed to avoid using topical nasal decongestants for more than a few days with any future viral upper respiratory tract infection. 

Upcoming case...

✓ **November:** Take a Breather!

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