

Managing Mild Upper Respiratory Tract Infections: Effective Ways to Break up a Cold

Do you have an effective treatment plan for mild upper respiratory tract infections (MURTI) ready for your patients? Following the release of a recent position paper¹, part 1 of this series explored key factors of a targeted approach to managing MURTI. This second article covers current recommendations for treating multiple cold symptoms, using Robert as an example. We will discuss over-the-counter (OTC) medications and the importance of pharmacist-physician collaboration in managing MURTI.

Case study: Robert exemplifies the concept of “man flu”, which may be a genuine phenomenon related to psychosocial expectations and immune differences between genders.^{2,3} Robert is seeking relief from a cold that has disrupted his routine. He is frustrated because his nasal congestion, cough, and headache are affecting his daily life, and he wants to get back on track fast. Should he visit his GP and ask for some antibiotics?

The primary point of contact for patients suffering from MURTI—within applicable local legal boundaries—is their pharmacist. By providing initial consultations with patients, pharmacists can disburden physicians and promote health literacy. Collaboration between pharmacists and physicians creates a multi-professional healthcare setting, which ensures comprehensive and personalised care for individuals with MURTI.¹ Of course, Robert should carefully monitor his symptoms and consult a GP if they worsen.

Antibiotics don't treat the common cold: It's vital to address the widespread use of antibiotics in managing MURTI. Even though antibiotics are ineffective against viral infections and can cause side effects such as gastrointestinal symptoms and allergies, they are still commonly prescribed for respiratory tract infections; indeed, 41% of all antibiotic prescriptions are for respiratory conditions, significantly contributing to antibiotic resistance.^{1,4} Your expertise and advice play an important role, especially for patients like Robert, in preventing the inappropriate use of antibiotics and protecting your patients' health.

Remember: A cold can cause behavioural malaise. The common cold causes physical discomfort AND behavioural changes, possibly due to cytokines and trigeminal nerve stimulation. Cytokines, which control inflammation, can reduce alertness and negatively impact mood. Upper respiratory tract infections stimulate the trigeminal nerve, causing changes in the brain stem. In fact, cold medications containing menthol and similar compounds provide symptomatic relief through changes in afferent stimulation.⁵

“Mild upper respiratory tract illnesses also influence efficiency and safety when people are working or studying. Effects on wellbeing and performance may extend to activities outside of work and study. Regular habits such as driving may be more problematic, and those with MURTI are more sensitive to the detrimental effects of stressors and fatigue.”

Prof. Andrew Smith⁶

Robert, 36
health-conscious
businessman



Robert is irritated and annoyed by his cold symptoms. He's unwell and:

- wants to recover quickly to function normally again
- believes antibiotics may help relieve symptoms

Figure 1: Phases of common cold and suitable therapeutic targets

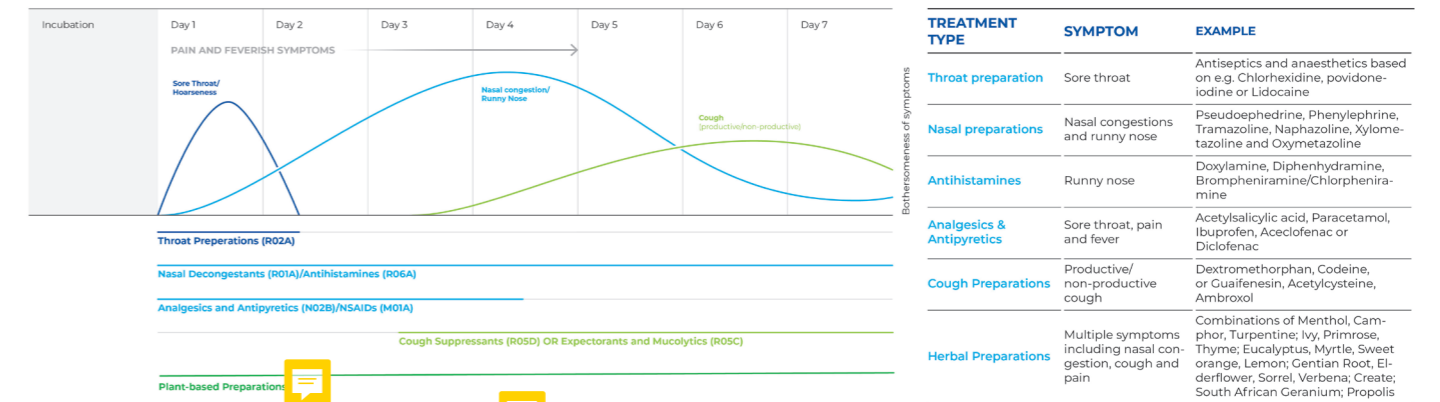


Figure adapted from Witek et al. (2015)⁹ and Smith et al. (2023)¹

Current management: MURTI are treated symptomatically with OTC medications, home remedies, food supplements, and plant-derived substances. These therapies target different molecular triggers and address a wide range of symptoms. Customised, continuous (co)treatment(s) targeting multiple symptoms commenced in a staggered manner, are recommended.¹

Various OTC products, including plant-derived medicines, are available, and patients benefit from tailored treatment approaches when experiencing MURTI.^{1,7} The scheme in Figure 1 summarises chemical and plant-derived active substances.

Well-established treatments for respiratory tract infections can include plant-derived molecules administered systemically, topically, or inhaled as aromatics. Inhaling so-called therapeutic vapours during a cold can improve breathing, reduce coughing, increase alertness, and improve sleep quality.¹ A recent review highlighted that aromatic compounds from natural plant extracts have multifaceted effects, potentially targeting multiple respiratory infection symptoms.⁸

“Plant-derived compounds such as menthol and eucalyptus have been used for a long time to treat respiratory tract infections. Their use is supported by ongoing research, which is revealing the specific ways in which these compounds alleviate congestion, coughs, and promote better sleep.”

Prof. Andrew Smith

Empowering patients: With his pharmacist's guidance, Robert gains a deeper understanding of how the common cold can impact his alertness and mood. He receives practical advice on how to alleviate his symptoms, including an individualised treatment plan.

Now what? Having optimised the symptomatic (co)treatment of MURTI, learn more about the importance of sleep and individualised treatment in part 3 of this series. Let's work together to provide holistic care and support to those affected by minor illnesses— “man flu”, or not!

Did you know that ?

- Sore throat, nasal congestion and cough are the most burdensome symptoms of MURTI
- Symptoms develop in a staggered yet overlapping manner (see left panel of Figure 1)
- Targeted treatment may require staggered use of drugs from different therapeutic classes
- Plant-derived substances may affect multiple symptoms, reducing the need for multiple pharmaceutical products



Watch this video to learn about hidden factors that affect your susceptibility to respiratory infections.



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