

Cochrane Corner

Upper respiratory tract infections: what you can do if you don't prescribe antibiotics

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Patients who present wanting an antibiotic for their common cold represent a common and difficult management issue for GPs. It raises concern about the patient leaving the practice or getting their antibiotics from another practitioner.¹ These are not issues of knowledge but of clinical strategy. Alternatives to this are to give delayed prescriptions which have been shown to reduce the collection of prescriptions for otitis

media, sore throat, cough and the common cold.²⁻⁶ Many GPs feel that giving another medication or treatment may satisfy the patient's need for symptom relief. In 1995 a paper from Otago found that 78% of patients with a diagnosis of upper respiratory tract infection received an antibiotic.⁷ There have been changes in the prescribing of antibiotics since then. Pharmac reported that in 1996 the amount spent on antibiotics was

\$36m while in 2001 the figure was \$16m. This is clearly a reduction in price and volume and given that there has not been an increase in admission to hospital from infectious diseases this is an impressive change. The evidence below regarding the effectiveness and harms for non antibiotic treatment comes from the Cochrane Library and the British Medical Journal's evidence-based textbook Clinical Evidence.

Symptom or Disease	Treatment	Effectiveness	Evidence	Disadvantages
Common cold	Nasal decongestants either topical or oral	Effective in terms of subjective benefit	Cochrane review ⁸	No evidence of benefit or harm in children. Can cause insomnia with oral forms
Common cold	Vitamin C	Effective in reducing symptoms by about a half day. May also prevent colds	Cochrane review. The trials were of variable quality ⁹	None reported
Common cold	Echinacea	Studies show benefit in terms of prevention and treatment but are mainly of poorly quality data	Cochrane review ¹⁰	There are many preparations of this substance
Common cold	Heated and humidified air	Some studies show a benefit and some show none	Cochrane review ¹¹	No evidence of harm except for risk of very hot water

Symptom or Disease	Treatment	Effectiveness	Evidence	Disadvantages
Common cold	Zinc: oral and intranasal	Conflicting evidence on benefit of the two methods of administering zinc	Cochrane review ¹²	Some evidence of altered taste, dry mouth, abdominal pain and headache
Cough in adults	Antitussives Expectorants Mucolytics Antihistamine-decongestant Antihistamine alone	Only antihistamine-decongestant consistent in reducing cough	Cochrane review ¹³	Side effects of insomnia
Sore throat	NSAIDs paracetamol	NSAIDs consistently reduced pain. Paracetamol reduced pain in one study but not another	Clinical evidence	Risk of GI hemorrhage in taking NSAID
Sore throat	Injected dexamethasone 10mg	Reduction in pain after two days	Clinical evidence	None reported
Sinusitis	Intranasal steroid	One study showed benefit in addition to taking antibiotics	Clinical evidence	None reported
Sinusitis	Oral pseudoephedrine	Benefit after one dose	Literature search	None reported
Influenza and influenza like syndromes	Homeopathic Oscillocoquinum	There was no evidence of benefit for prevention however it may reduce the length of illness by 0.28 days	Cochrane ¹⁴	Not enough evidence to give as first line treatment for influenza or flu like syndrome

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Members of the Royal New Zealand College of General Practitioners can access the full reviews by contacting Cherylyn Pearson at the College in Wellington for the access codes to the Cochrane library: cpearson@rnzcgp.org.nz. Access to clinical evidence can be obtained at <http://www.clinicalevidence.org/>