Topical steroids are better than leukotriene receptor antagonists at relieving nasal symptoms of seasonal allergic rhinitis

Research question What is the role of oral leukotriene antagonists in the treatment of seasonal allergic rhinitis?

Answer They work better than a placebo, and as well as antihistamines. But intranasal steroids work best for nasal congestion

Why did the authors do the study? Oral antihistamines and intranasal steroids are traditional treatments for seasonal allergic rhinitis. Oral leukotriene receptor antagonists such as montelukast are also effective, but the relative roles of these three treatments are not yet established. These authors wanted to review all the randomised evidence relating to oral leukotriene receptor antagonists to find out where they fit in the scheme of treatment options for allergic rhinitis.

What did they do? They systematically searched through Medline, Embase, CINAHL; the Cochrane controlled trials register; and the top 10 allergy journals to find randomised controlled trials evaluating any oral leukotriene receptor antagonist alone or in combination with an antihistamine in adolescents or adults with seasonal allergic rhinitis. Then they searched the reference lists of relevant trials, and contacted the authors for any unpublished data. They did not restrict their search by language or by date of publication and they rated the quality of trials using a validated instrument. Data from individual trials were abstracted and pooled in meta-analyses

What did they find? The authors found 17 randomised controlled trials involving 6231 adults with seasonal allergic rhinitis. Most trials had reasonably robust methodology.

In the pooled analyses: intranasal steroids worked better than oral leukotriene receptor antagonists (mostly montelukast) at relieving nasal symptoms such as congestion; intranasal steroids also relieved nasal congestion better than the combination of montelukast and an oral antihistamine, although there was some heterogeneity between trials; oral leukotriene antagonists relieved nasal symptoms, eye symptoms, and improved quality of life significantly better than placebo; montelukast and antihistamines seemed to work about as well as each other on all outcomes; the combination of montelukast and an oral antihistamine relieved eye symptoms better than an antihistamine alone.

Most trials tested two to four weeks of treatment, and most of the differences between treatments were moderate. The trials reported few side effects from any treatment, none were serious.

What does it mean? This systematic review and meta analysis suggests that for patients with seasonal allergic rhinitis, oral leukotriene receptor antagonists such as montelukast work better than a placebo, about the same as an oral antihistamine, but not as well as an intranasal corticosteroid such as fluticasone. Steroids seem most effective against nasal symptoms, particularly congestion. The trials in this review were of reasonable quality and the authors had few problems with heterogeneity between trials, which means the results are probably believable. Montelukast is by far the best researched leukotriene receptor antagonist for seasonal allergic rhinitis.

Rodrigo GJ, Yañez A. The role of antileukotriene therapy in seasonal allergic rhinitis: a systematic review of randomized trials. *Ann Allergy Asthma Immunol.* 2006;96:779-86

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Editor's choice

The clear vision of outsiders

It takes outsiders to see things with the most clarity. Thus, in our Health Policy debate this week—on whether the NHS should be more independent of government and politicians—it is two Americans, Don Berwick and Sheila Leatherman, who articulate most clearly what the NHS should be about and how it seems to have lost its way (p 254). “The NHS is not just a national treasure; it is a global treasure.” It needs “the time, space, and constancy of purpose to realise its enormous promise.”

Berwick and Leatherman, together with Stephen Thornton, Gwyn Bevan, and Stephen Gillam (pp 251-5), are responding to Fiona Godlee's call in her editor's choice earlier this year for an independent NHS authority, protected from the capricious effects of party politics. Interestingly, while all the commentators worry about constant reorganisation and inconsistent changes in direction, none want to see politicians removed too far from the scene. Stephen Thornton reminds us that the NHS would never have existed without a political vision (p 251), Stephen Gillam fears that an independent authority could promote an expanding market in a way a government “would never otherwise get away with.” And Berwick and Leatherman argue against removing NHS leadership too far from government power. “It might prove unwise to trade the constructive role of engagement for independence.”

Meanwhile the government is tinkering again. On p 211 Chris Ham analyses a recent update on England's health reforms from the department of health, which also gives guidance on commissioning. The guidance aims to boost the skills of primary care trusts in commissioning services and suggests offering incentives to general practitioners to tempt them take part in practice based commissioning. Ham is sceptical of whether these plans will work, not least because the same guidance document allows provider trusts to operate outside their own areas and beyond acute care. That may be good for seamless care for communities, but it further enhances the power of providers in the face of still weak commissioners.

In his NHS commentary Gwyn Bevan (p 252) sees NHS governance as essentially a choice between a competitive market and a centralised regime based on targets. The criticisms of targets are familiar, but an investigation from the Healthcare Commission shows that targets can also be bought at a price in human lives (p 215-a). From its investigation of outbreaks of *Clostridium difficile* infection at Stoke Mandeville Hospital the commission concludes that the hospital's senior managers were so preoccupied with meeting targets on waiting times in the accident and emergency department that they didn't heed the advice of their clinicians, infection control staff, or the local health protection agency. “Only the involvement of the Department of Health . . . and national publicity” changed the trust's approach. Once again, we rely on the clear vision of outsiders.

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