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Steroids have no significant effect on the clinical course of infectious mononucleosis at 1 to 3 months

Should you use steroids to treat infectious mononucleosis?

Evidence-based answer

Generally, no. Studies of steroids to treat infectious mononucleosis have found no significant effect on the clinical course of the illness at 1 to 3 months (strength of recommendation [SOR]: **B**, 1 randomized controlled trial [RCT] and 1 nonrandomized double-blind trial). Although steroids have been shown to improve resolution

of hematologic abnormalities, fever, and white blood cell count, and may shorten length of inpatient stay (SOR: **B**, 1 nonrandomized double-blind trial and 1 RCT), no significant difference was found in resolution of symptoms with or without steroids (SOR: **A**, 2 RCTs).

Clinical commentary

Do benefits sometimes outweigh risks?

Systematic reviews are good for answering broad clinical questions. In this case, the evidence clearly states that steroids have no role as routine therapy for acute mononucleosis.

But steroids do have effects (abrupt reduction in inflammation) as well as side effects. If a patient has an acute airway obstruction or a looming hospitalization

for dehydration, the known therapeutic effects of steroids may suddenly appear to outweigh the potential downsides. In such specific clinical scenarios, physician and patient decision making remains guided more by extrapolations of the evidence than outcomes data.

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Evidence summary

A Cochrane review of 6 relatively small (N=24-94) RCTs found insufficient evidence to support using steroids to manage infectious mononucleosis.¹⁻⁷ We found no other studies.

Steroids don't significantly reduce throat pain, weight loss

In an RCT of 40 patients, 1 dose of dexamethasone reduced throat pain at 12 hours in 60% of the treatment group, compared with placebo.² However, no significant differences were noted

at 1 and 7 days.

A trial of combined therapy with acyclovir and prednisolone in 94 patients found no differences in resolution of sore throat, weight loss, and absence from school or work in the treatment group.³ Likewise, a study of a 6-day prednisone taper found no difference in resolution of symptoms in the prednisone group (N=47).⁴

Conflicting findings on steroids and fever—and adverse effects

One small, double-blind study of predni-

sone (N=26 hospitalized college students) showed a significant difference in duration of fever and antibody titers compared with aspirin.⁵ Two other studies of the duration of fever didn't find convincing evidence of benefit, however.^{2,7} One of these studies did find that patients' in-firmay stays were shortened an average of 3 days, although the data to support this finding were not reported.⁷

Two studies also reported that 3 patients experienced adverse events, including dehydration and severe pharyngitis,² acute onset of diabetes mellitus,⁵ and peritonsillar cellulitis.⁵ Other potential adverse reactions include transient hyperglycemia, sodium retention, nausea, vomiting, and insomnia.⁸

Recommendations

We found no recommendations concerning the use of steroids to treat infectious mononucleosis. A review article from *American Family Physician* recommends avoiding corticosteroids to treat the condition unless the patient is experiencing severe complications.⁹ ■

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1 dose of dexamethasone reduced throat pain at 12 hours in 60% of patients vs placebo, but the effect did not last

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