

# Balsalazide achieved symptomatic remission sooner than mesalamine for ulcerative colitis

Pruitt R, Hanson J, Safdi M, et al. **Balsalazide is superior to mesalamine in the time to improvement of signs and symptoms of acute mild-to-moderate ulcerative colitis.** *Am J Gastroenterol.* 2002;97:3078-86.

## QUESTION

In patients with active, mild-to-moderate ulcerative colitis, does treatment with balsalazide achieve higher symptomatic remission rates than mesalamine?

## DESIGN

Randomized (unclear allocation concealment\*), blinded (clinicians and patients),\* placebo-controlled trial with follow-up on day 14, 28, and 56.

## SETTING

24 centers in the United States.

## PATIENTS

173 patients (mean age 41 y, 55% men) with newly diagnosed or recently relapsed mild-to-moderate ulcerative colitis with  $\geq 12$  centimeters of sigmoidoscopically verified disease, rectal bleeding, moderate or severe functional assessment score, and a moderate or severe sigmoidoscopic score. Exclusion criteria were  $> 5$  relapses of ulcerative colitis in the preceding 2 years; oral, rectal, or intravenous steroids within 14 days; immunosuppressants within 90 days or 5-aminosalicylic acid (ASA)-containing agents within 3 days; hypersensitivity or failure to respond to 5-ASA agents; severe

ulcerative colitis; or an enteric pathogen. All patients were included in the analysis.

## INTERVENTION

Patients were stratified by time since diagnosis and extent of disease and allocated to balsalazide, 6.75 g/d ( $n = 84$ ), or mesalamine, 2.4 g/d ( $n = 89$ ). Study treatment was placebo-controlled, thus patients received balsalazide or placebo as 3 capsules and mesalamine or placebo as 2 tablets, 3 times/day.

## MAIN OUTCOME MEASURES

Symptomatic remission (normal or mild functional assessment and absence of rectal bleeding). Secondary outcomes included time to symptomatic remission and rate of complete remission (symptomatic remission plus a normal or mild sigmoidoscopic result).

## MAIN RESULTS

Analysis was by intention to treat. Overall, symptomatic remission rates did not differ between the 2 groups (Table). Among

patients with newly diagnosed disease  $\leq 40$  cm, more achieved remission with balsalazide than with mesalamine at 14 days (42% vs 13%,  $P = 0.035$ ), and achieved remission sooner (11 vs 22 d,  $P = 0.031$ ). Patients with recently relapsed disease  $> 40$  cm had less response to treatment, and balsalazide and mesalamine groups did not differ for time to remission (43 vs 42 d). By day 56, groups did not differ for achieving remission, and rates were similar for all strata.

## CONCLUSION

In patients with active, mild-to-moderate ulcerative colitis, treatment with balsalazide achieved symptomatic remission earlier than with mesalamine.

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\*See Glossary.

## Balsalazide vs mesalamine for acute, mild-to-moderate ulcerative colitis at 8 weeks†

Outcomes	Balsalazide	Mesalamine	RBI (95% CI)	NNT
Primary outcome	46%	44%	8.7% (–52 to 22)	Not significant

†Primary outcome = symptomatic remission rate. Abbreviations defined in Glossary; RBI, NNT, and CI calculated from data in article.

## COMMENTARY

Pruitt and colleagues compared balsalazide with mesalamine for treatment of ulcerative colitis. Both drugs release 5-ASA into the colon with minimal absorption into the small intestine.

The study included patients with new onset or recently relapsed ulcerative colitis, but the authors do not indicate how many patients had first onset of disease. It would have been interesting to know the proportions of relapsing and new-onset patients in the 2 treatment groups. Presumably, most patients who relapsed had been receiving an active preparation for prophylaxis against recurrence, an intervention of proven effectiveness (1). The most commonly used preparation for this purpose is probably Asacol, the control medication used in this study. It might be assumed that patients who relapse while taking a given preparation are less likely to enter remission after an interval that could be as little as 3 days in this study. Regardless of this potentially confounding factor, no difference was observed between the 2 treatments in the proportion of patients in clinical remission (primary outcome) at 8 weeks. The number of patients who had complete remission or withdrew because of treatment failure were also similar between groups.

Should balsalazide be used as initial treatment rather than another 5-ASA preparation? The data are not at all convincing on this point. The choice may depend on cost or occurrence of adverse events. Balsalazide seems to offer no advantage over mesalamine in either

respect. However, fewer patients may have adverse effects with balsalazide than with sulfasalazine, which delivers 5-ASA to the colon by the same mechanism (2) but has a sulfa residue associated with adverse effects. If remission in patients with left-sided disease is not achieved as promptly as the patient or physician anticipates, adopting the alternative form of drug delivery is probably not a reasonable strategy. Use of a topical 5-ASA or steroid preparation can be recommended in this circumstance on the basis of the available evidence (3).

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## References

1. Sutherland L, Roth D, Beck P, May G, Makiyama K. Oral 5-aminosalicylic acid for maintenance of remission in ulcerative colitis. *Cochrane Database Syst Rev.* 2002;(4):CD000544.
2. Green JR, Mansfield JC, Gibson JA, Kerr GD, Thornton PC. A double-blind comparison of balsalazide, 6.75 g daily, and sulfasalazine, 3 g daily, in patients with newly diagnosed or relapsed active ulcerative colitis. *Aliment Pharmacol Ther.* 2002;16:61-8.
3. Cohen RD, Woseth DM, Thisted RA, Hanauer SB. A meta-analysis and overview of the literature on treatment options for left-sided ulcerative colitis and ulcerative proctitis. *Am J Gastroenterol.* 2000;95:1263-76.