Balsalazide achieved symptomatic remission sooner than mesalamine for ulcerative colitis


**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 ≥ 12 centimeters of sigmoidoscopy 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 ≤ 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.

*See Glossary.

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

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Balsalazide</th>
<th>Mesalamine</th>
<th>RBI (95% CI)</th>
<th>NNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary outcome</td>
<td>46%</td>
<td>44%</td>
<td>8.7% (52 to 22)</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

† 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 received an active preparation for prophylaxis against recurrence, an intervention of proven effectiveness. 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 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.

John W.D. McDonald, MD
University of Western Ontario
London, Ontario, Canada

**References**