

**PROBIOTIC HELPS TO ERADICATE *H. PYLORI***

The probiotic *Saccharomyces boulardii* could improve the efficacy of triple therapy for *Helicobacter pylori* eradication, according to a Korean research group. "This addition [of *S. boulardii*] clearly led to higher ... eradication rates and lessened side effects," write the researchers.

Guidelines currently recommend that *H. pylori* eradication therapy should comprise  $\geq 7$  days of treatment with a PPI and two antibiotics. However, eradication rates with this triple therapy are falling, as a result of increased antibiotic resistance and poor adherence to treatment (related to adverse events, such as diarrhea and epigastric pain).

Probiotics are thought to have anti-inflammatory effects. Thus, these researchers randomly assigned 991 patients who were infected with *H. pylori* to one of three treatment groups: 7 days of triple therapy; 7 days of triple therapy with 4 weeks of *S. boulardii*; or 7 days triple therapy with 4 weeks of both *S. boulardii* and DA-9601 (a plant-derived, mucoprotective agent).

In the triple-therapy-only group, *H. pylori* eradication rates were markedly lower than in the other two groups (71.6% versus 80.0% and 82.1%, respectively), whereas poor adherence and adverse events were both increased. However, the addition of DA-9601 to triple therapy and *S. boulardii* did not improve eradication rates further.

The researchers speculate that the immunomodulatory effects of *S. boulardii* might include preventing the release of proinflammatory cytokines by type 1 T helper cells, which are implicated in persistent *H. pylori* infection. "Probiotics cannot be considered an alternative to ... PPI-based triple therapy," write Song and colleagues. Nonetheless, they suggest probiotics plus PPI-based triple therapy could provide useful gains in eradication rates, through both reduced adverse event rates and increased adherence.

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