New effective treatment regimen for children infected with a double-resistant Helicobacter pylori strain.

Abstract:

The increasing number of pediatric patients infected with multiresistant Helicobacter pylori strains calls for evaluation of treatment regimens. Second-line antibiotics such as tetracycline or quinolones are not licensed for children. Because in vivo resistance to metronidazole may be overcome in vivo by a high dose and prolonged intake, we evaluated the eradication rate and side effects of a high-dose triple therapy in pediatric patients with culture-proven double resistance. In this open multicentre trial, 62 children (15 kg) infected with an H pylori strain resistant to metronidazole and clarithromycin were treated according to body weight classes with amoxicillin (~ 75 mg/kg/day), metronidazole (~ 25 mg/kg/day) and esomeprazole (~ 1.5 mg/kg/day) for 2 weeks. Adherence and adverse events were assessed by a 2-week diary and telephone interviews at days 7 and 14 of treatment. Primary outcome was a negative C-urea breath test after 6 weeks. Of 62 patients, 5 were lost to follow-up, 12 were nonadherent, and 45 treated per protocol. Eradication rates were 66% (41/62) [confidence interval 54-78] (intention to treat) and 73% (33/45) [confidence interval 60-86] (per protocol). Success of treatment was not related to dose per kilogram body weight. Mild to
moderate adverse events were reported by 21 patients, including nausea (10.8%), diarrhoea (8.9%), vomiting (7.1%), abdominal pain (5.4%), and headache (3.6%), and led to discontinuation in 1 child. High-dose amoxicillin, metronidazole, and esomeprazole for 2 weeks is a good treatment option in children infected with a double resistant H pylori strain.