# Nitazoxanide Promising Treatment for Rotavirus

BY JONATHAN GARDNER
*London Bureau*

An anti-infective drug now used to treat illnesses from waterborne parasites also can shorten the course of rotavirus in children, results of a small study have shown.

In a trial of 38 children treated at Cairo (Egypt) University Children's Hospital, treatment with nitazoxanide more than halved the time spent in a hospital for treatment of diarrhea resulting from a rotavirus infection (Lancet 2006;doi:10.1016/S0140-6736(06)68852-1).

Nitazoxanide (Alinia) is approved for treatment of *Cryptosporidium parvum* and *Giardia lamblia* in the United States. Its manufacturer, Romark Laboratories, also has filed an investigational new drug application with the Food and Drug Administration to test its effectiveness as a treatment for chronic hepatitis C.

Romark was a sponsor of this study, and its lead investigator, Jean-Francois Rossignol, is a professor at the Romark Institute for Medical Research, Tampa, Fla., as well as a shareholder in the company.

Rotavirus kills about 500,000 children a year, mostly in underdeveloped countries where poor nutrition makes children more vulnerable.

A vaccine had been developed for the virus, but that Wyeth vaccine—RotaShield—was pulled from the market in 1999 because of a higher rate of intussusception linked to the vaccine.

The FDA approved a new live vaccine, RotaTeq (Merck & Co.), for the United States in February.

The study randomized 50 children younger than 12 years suffering from diarrhea into groups treated with a 3-day course of nitazoxanide in an oral suspension or a placebo to test the length of time until disease resolution.

All received routine care, including fluid replacement therapy and nutritional management of diarrhea. Twelve children were excluded because rotavirus was not found to be the cause of their diarrhea, the researchers said.

The median time from first dose to disease resolution was 31 hours among the children treated with nitazoxanide, compared with 75 hours for the children in the placebo group, Dr. Rossignol and associates reported.

The two groups were not significantly different in their demographic makeup, symptoms, nutritional status, or the length of time they had experienced diarrhea or hospitalization as a result of the diarrhea. Most of the study patients were malnourished with reduced immunity. In both groups, early responders tended to be better-nourished, had been sick longer, and had been in the hospital longer when receiving the first dose, the investigators wrote.

Dr. Rossignol and associates added that despite laboratory results indicating otherwise, they cannot rule out the possibility that hidden pathogens might have affected the results of the study, although coinfections with rotavirus are rare.

The investigators also noted that they did not take stool samples during the study to assess the relationship between the clinical response and the rotavirus excretion. ■



## Antimicrobial Soaps: No Need, Say Canadian Doctors

Handwashing with plain soap and water—not with antibacterial soaps—is still the most important way to reduce the spread of germs, according to the Canadian Paediatric Society.

The society published a position statement in an issue of Paediatrics & Child Health stating that the use of antimicrobial products is unnecessary to keep children healthy.

"You don't need to buy toys treated with antimicrobial products," Dr. Joanne Embree, chair of the society's infectious diseases and immunization committee, said in a statement.

"When children put toys in their mouths or play with them when they are sick, simply clean them with water and soap and rinse well."

When soap and water are not available, alcohol-based solutions or gels can be used, according to the society (J. Paediatr. Child Health 2006;11:169-73).

**—Joyce Frieden**