Most Yogurt Probiotics No Match for Infection

BY TIMOTHY F. KIRN
Sacramento Bureau

SALT LAKE CITY — Many physicians who see a patient with acute gastroenteritis might advise the patient to go home and eat some yogurt, in Dr. Yoram Elitsur’s experience. But, most commercial yogurt probably contains too little Lactobacillus species to be of any use, according to his testing of 10 popular brands.

“I am not saying they are cheating us,” Dr. Elitsur, director of pediatric gastroenterology at Marshall University, Huntington, W.Va., said in an interview. “All I am saying is that there is not enough Lactobacillus in there to treat acute gastroenteritis.”

Several studies have suggested that probiotics, such as Lactobacillus and Bifidobacterium species, may be of benefit in treating acute gastroenteritis, reducing the duration of diarrhea. Surprisingly, they may be more effective when the cause of the gastroenteritis is viral, rather than bacterial, Dr. Elitsur said in a poster presentation at the annual meeting of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition.

But the concentration of live Lactobacillus species needed to be present is between 106 and 107 colony-forming units (CFU) per day. Dr. Elitsur tested 10 brands of yogurt that said on the label that they were live and/or active-culture products. He cultured them on agar plates, and performed polymerase chain reaction (PCR) testing to see if indeed the strains of bacteria in the yogurt were Lactobacillus acidophilus and/or Bifidobacterium bifidum, the probiotics shown most often in other studies to be beneficial in gastrointestinal disease. He found that only the capsule probiotic (Culturelle) that he tested and used as a control had a concentration of CFU. One of the yogurt brands, all but one met the National Yogurt Association’s minimum concentration, but none had the concentration necessary to provide a benefit for acute gastroenteritis. The brand that did not meet the National Yogurt Association’s minimum concentration of 108 CFU/g was YoBaby (Stonefield Farm), which had 4.8 x 105 CFU/g.

The other brands tested included Dannon DanActive, Dannon Fruit on the Bottom, Dannon Activa, Yoplait, Breyers Light Probiotic Plus, Breyers Fruit on the Bottom, Kroger Blended, Kroger Fruit on the Bottom, and Great Value.

The PCR testing showed that only three brands had any live Bifidobacterium species. According to his testing, a child would have to consume about 100 containers of these yogurts in order to get enough probiotic to treat gastroenteritis, Dr. Elitsur said in the interview.

‘Anyway you look at it, these companies cannot claim that their yogurt is sufficient to treat gastroenteritis in children,’ he said.

But then, none of them do make that specific claim, or they would be subject to drug regulation, he added.

Dr. Elitsur said he had no conflicts of interest with any of the products mentioned.

Cases of Rocky Mountain Spotted Fever Increase Almost Threefold

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — Cases of Rocky Mountain spotted fever increased nearly threefold between 2001 and 2005, and the rate of complications from the disease fell from 8% to 4%. Immunocompromised patients were most likely to be hospitalized with the disease (41%), followed by adults over the age of 70 years (40%) and children under the age of 5 (33%).

Mr. Openshaw also reported that 53 counties in the United States had a fivefold increase in the incidence of Rocky Mountain spotted fever. Moreover, about half of the 1,879 counties reporting disease were newly affected during the study period.

The disease was reported in every state, except Alaska, California, Hawaii, Maine, and Washington.

‘Physicians should be aware of the increase in Rocky Mountain spotted fever,’ he said, adding that they should also be aware of “the difficulty in diagnosing a lot of these patients and the importance of proper treatment.”

Textbook Pattern Is Not at All Common in Secondary Syphilis

BY KERRI WACHTER
Senior Writer

BALTIMORE — Secondary syphilis doesn’t always have the textbook lichenoid-psoriasiform appearance, said Dr. Timothy H. McCalmont, a professor of clinical pathology at the University of California, San Francisco.

“There’s been a resurgence in syphilis. Keep it on your differential diagnosis short list,” said Dr. McCalmont. “The microcopy of this disease is highly varied and the textbook descriptions are perhaps a little bit on the simplistic side.”

‘Keep [syphilis] on your differential diagnosis short list.’ The microscopy of this disease is highly varied and the textbook descriptions are perhaps a little bit on the simplistic side.

The confirmation was made by immunohistochemistry, polymerase chain reaction-based assay, or serology. Histopathologically, most of the 23 syphilis cases did not demonstrate the textbook lichenoid-psoriasiform pattern. A lichenoid infiltrate was present in 11 of the specimens (48%), whereas psoriasiform epidermal hyperplasia was present in only 8 (35%). Clear involvement of the epidermal-dermal junction was found in 18 (78%). However, 5 (22%) showed wholly dermal involvement. The dermal infiltrate included lymphocytes, histiocytes in 11 (48%), and plasma cells in 22 (96%). However, plasmacytes were conspicuous in only 7 specimens (30%). Eosinophils are generally not found in syphilis, and none were found in any of these specimens.

“If you see a juxtaposition of eosinophils and plasma cells, then it’s probably not syphilis,” said Dr. McCalmont.

When using immunoperoxidase staining for Treponema pallidum, look for organisms at the junctional zone. They often tend to have a coiled morphology that is easily picked up on staining, said Dr. McCalmont. The organism load is usually high.

There are a variety of different patterns that can be seen with secondary syphilis, said Dr. McCalmont. Two of the most prototypic lichenoid-psoriasiform patterns, granulomatous, sarcoïdike, and lupus-like patterns can be seen.

The main image shows the textbook lichenoid-psoriasiform configuration that is commonly seen in biopsies of secondary syphilis. The inset image shows how the immunoperoxidase staining for T. pallidum readily demonstrates the causative spirochetes.