

Expert: Vaccinate All Children for Hepatitis A

BY LINDA LITTLE
Contributing Writer

SCOTTSDALE, ARIZ. — Vaccination for hepatitis A should be extended to children above the age of 2 with catch-up immunization for older children and adolescents, William F. Balistreri, M.D., advised.

"We need to rethink the vaccine strategy to see if we can have a rational plan for hepatitis A that would be more inclusive," said Dr. Balistreri, director of pediatric gastroenterology, hepatology, and nutrition at Children's Medical Center, Cincinnati.

He advised pediatricians to vaccinate children over the age of 2 years.

"Pediatricians need to get beyond these barriers and vaccinate these children. We have a vaccine that works. We have a disease that can kill," Dr. Balistreri said in an interview.

Major outbreaks of hepatitis A still occur in the United States; the majority of



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DR. BALISTRERI

these are food borne, he said at a pediatric update sponsored by the Phoenix Children's Hospital.

Children play a vital role in the spread of hepatitis A virus, which can be transmitted through food, fecal matter, and person-to-person contact.

"Day care is a hotbed for transmission," he said. "You have lots of children, few caretakers, everything goes in the mouth, caretakers may change the diaper on the same surface where children play, and children excrete the virus longer [than adults]."

To make matters worse, a young child can be infected and have few, if any, symptoms. Usually, outbreaks in day-care centers are detected only after the adult contacts become sick, he said.

While 85% of adults will become jaundiced, only about 10%-15% of children do. Children are likely to have a mild fever, a runny nose, and maybe a little diarrhea, Dr. Balistreri said. "Some children have no symptoms whatsoever." In contrast, adults become jaundiced and have nausea, vomiting, anorexia, and abdominal pain. It can be deadly for some adults.

"Children and young adults do fairly well," he said. "But for anyone over the age of 49, the mortality is up to 3%-4%. This is a disease that can take lives."

If middle-aged adults are infected, this form of hepatitis can be devastating and costly, he said. There are more than 63,000 symptomatic infections in adults each year, resulting in 8,403 hospitalizations and 255 deaths. The illness results in 829,000 work loss days, 7,466 years of life lost at an annual cost of \$489 million.

"The bottom line is the vaccine is cost effective when you look at the implications," said Dr. Balistreri.

Part of the problem is that 80% of chil-

dren excrete the virus for 3 weeks, some as long as 6 weeks. This results in adults, who are hit much harder by the symptoms, being susceptible to the virus. "Not only are children not symptomatic, but they continue to excrete the virus," he said. "No individual is sick at the time they are shedding."

Something as simple as eating a school lunch can result in an outbreak, as evidence of the Michigan outbreak in 1997 shows, when strawberries contaminated in

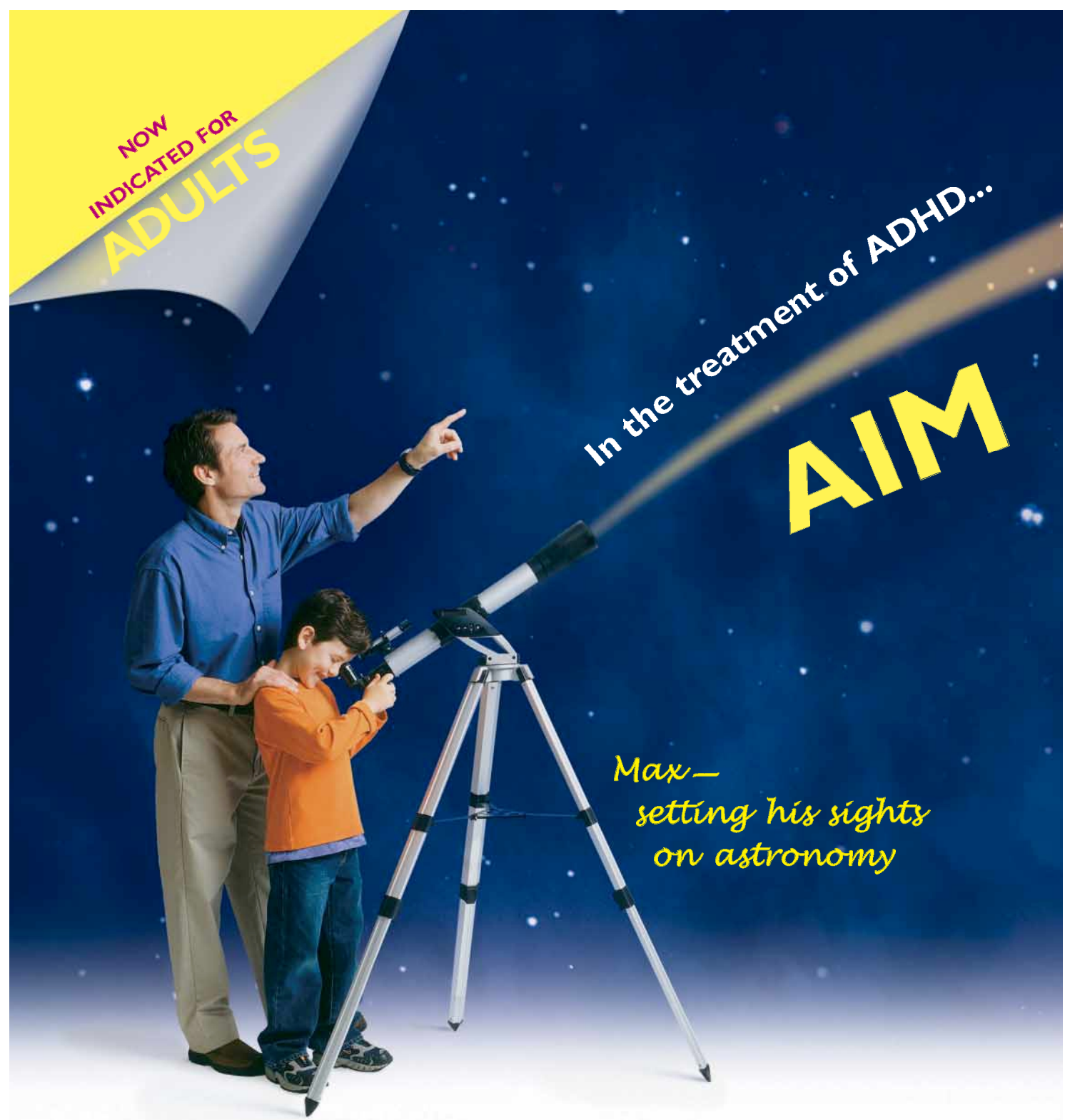
Mexico and processed in California were then shipped to the school lunch program in Michigan.

"We need to use a vaccine not only to protect the individual but the community, so it can't gain a foothold," Dr. Balistreri said.

Once an outbreak occurs, then immunoglobulin can be given to prevent symptomatic infection in contacts. While there is nothing wrong with this, the timing is off, Dr. Balistreri said. Prevention ap-

pears to be the most effective approach.

A Thailand study of 40,119 school-aged children showed the vaccine was effective in immunizing children against hepatitis A. Of the 19,037 children given the vaccine, 94% developed antibodies in 8 months and 99% developed antibodies at 17 months. There were 38 cases of clinical hepatitis A in the control group, compared with only 2 in the vaccinated children, both of whom were probably infected with the virus at time of vaccination.



The most common adverse events in pediatric trials included loss of appetite, insomnia, abdominal pain, and emotional lability. The most common adverse events in the adult trial included dry mouth, loss of appetite, insomnia, headache, and weight loss. The effectiveness of ADDERALL XR for long-term use has not been systematically evaluated in controlled trials. As with other psychostimulants indicated for ADHD, there is a potential for exacerbating motor and phonic tics and Tourette syndrome. A side effect seen with the amphetamine class is psychosis. Caution also should be exercised in patients with a history of psychosis.

Currently, hepatitis A vaccination is recommended for those with occupational risks, such as health care and day-care workers, travelers to endemic regions, children in high-rate communities, persons with chronic liver disease, those with high-risk behaviors, and transplant recipients or others who are immune depressed.

When it was found that Native American children had a fourfold higher rate, the children were vaccinated, he said. That rate dramatically dropped after vaccinations were provided in 1996. Three years later, children in 11 Western states—where the incidence of hepatitis A was twice the national average—were targeted.

“It did a great job in those states with a high rate,” he said, but the adjoining states then developed a higher incidence. “The virus shifted east. The virus doesn’t respect state lines.”

That’s the problem in only targeting high risk groups, he said.

Health officials should learn from the experience of hepatitis B, he said, where targeting the high-risk groups did not result in a substantial reduction in the frequency of hepatitis B. “We lost 10 years because we didn’t start off with a universal vaccination program,” he said.

He gave the example of migrant children in Florida where 244 children were

tested and on average half already had been infected. The numbers increased with age with 34% of the 2- to 5-year-olds testing positive for hepatitis A antibodies and 81% of the 14-year-old and over group testing positive.

“In a community that wasn’t targeted, about half of the children already had been infected,” he said. “This is a missed opportunity.”

The biggest impediments to universal hepatitis A vaccination in children include cost, addition of yet another vaccination to a complex schedule, and the rising fear among some parents about vaccination.

But the vaccine has proved both safe and

cost effective, he said. The cost of the vaccine under federal programs is \$11.15 a dose while in private practice the cost is between \$26 and \$30 per patient. Administration fees are about \$12 a dose.

“Children play an important role in the spread of hepatitis A,” said Dr. Balistreri. “There already is an immunization schedule in place for children, whereas trying to get adults immunized is another story. It makes great sense.”

One solution may be a combined hepatitis A and B vaccine for children, he said. Currently, the combined vaccine is approved for children in Europe, but approved only for adults in the United States. ■

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