Zoster Vaccine Could Have Off-Label Use

BY BRUCE JANCIN

VAIL, COLO. — Giving herpes zoster vaccine to children who are immunocompromised, or are about to become so, is an off-label use that is nonetheless worthy of strong consideration in selected cases.

That’s the view of vaccine expert Dr. Myron J. Levin, who notes that herpes zoster in immunocompromised children tends to be extremely severe.

“It makes sense to give the vaccine to children who’ve had chicken pox and are going to have a transplant. Maybe you can protect them from zoster down the road by giving them the zoster vaccine up front. It’s a new thought,” he said at a conference on pediatric infectious diseases sponsored by the Children’s Hospital, Denver.

As for children who are already immunocompromised, it is important to look for safe opportunities in which to administer the herpes zoster (HZ) vaccine, which contains 14-fold higher titers of varicella zoster virus than the childhood varicella vaccine.

“It’s probably going to be safe wherever it’s safe to give the varicella vaccine to immune-compromised kids. That’s where I would start. The reason I can say that is because they already have some preexisting immunity. You’re not giving this vaccine to a naive person, you’re giving it to someone who has a history of varicella. So it’s unlikely they’re going to have serious side effects unless they’re very, very immunocompromised,” explained Dr. Levin, professor of pediatrics and medicine at the University of Colorado at Denver.

Thus, HZ vaccination is to be avoided in situations of severe immune compromise because it could result in a fulminant case of zoster, he added.

In contrast, circumstances in which giving varicella vaccine—and, by extension, HZ vaccine—appears to be safe and beneficial include HIV-infected patients with more than 15% CD4 cells, particularly if highly active antiretroviral therapy is on board; recipients of a solid organ transplant 6 months or more before without complications or need for rejection therapy; lymphoma patients who successfully completed treatment at least 3 months earlier; and individuals who are 18-24 months post–stem cell transplant with no rejection episodes or other problems, good cell counts, and who are off immunosuppressive therapy, according to Dr. Levin.

The HZ vaccine is licensed for immune-competent individuals aged 60 years and older. It is now in large clinical trials looking at enlarging the recipient pool to include 50- to 59-year-olds, he said.

Dr. Levin disclosed that he is a consultant to, on the speakers bureau for, and receives royalties from Merck.

Propranolol Effective for Infantile Hemangiomas

BY MICHELE G. SULLIVAN

The beta-blocker propranolol appears almost 100% effective in treating severe infantile hemangiomas, according to a French case series of 32 patients.

The group, led by Dr. Véronique Sans of Children’s Hospital in Bordeaux, France, found that even life-threatening hemangiomas responded dramatically to propranolol treatment, with overnight color change and lesion softening after the first dose (2-3 mg/kg per day).

“Symptoms such as dyspnea and hemodynamic compromise (due to the lesions) regressed within 48 hours, and spontaneous ocular opening (in children with periorbital lesions) was possible within 7 days,” wrote Dr. Sans and her colleagues (DOI: 10.1542/peds.2008-3458). After 2-14 months of treatment, all hemangiomas had become nearly flat, with residual telangiectasias. There was mild recoloration in four cases and mild regrowth in three cases.

The observations in the paper are a fairly accurate representation of propranolol’s remarkable effect on these lesions, Dr. Bernard Cohen said in an interview. Last July, after Dr. Sans’ colleagues made an initial public report of their experience, Dr. Cohen began using propranolol as the first-line treatment for serious infantile hemangiomas in the pediatric vascular lesions clinic at Johns