Most Cancer Patients Don't Get Flu Shots

BY PATRICE WENDLING Chicago Bureau

STOCKHOLM — Vaccination coverage for very severe manifestations of influenza remains low in patients with cancer, even though they are at high risk.

Just 34% of 112 consecutive cancer patients receiving treatment at the Hôpital Cochin, Paris, also received flu shots in 2008. Of these, 14% had chemotherapy as their only indication for vaccination, and 44% had other indications such as bronchopathy and diabetes.

The main reasons for absence of vaccination were lack of prompting by the treating physician (72%), fear of side effects (33%), and concerns about vaccine effica-



Oncologists should be more aware of the necessity to vaccinate patients who have cancer.

DR. LOULERGUE

cy (10%), Dr. Pierre Loulergue reported in an award-winning poster at the European Society of Medical Oncology Congress.

General practitioners administered the flu shots in 56% of vaccinated patients. "The GP could do 100% of vaccinations," Dr. Loulergue said in an interview. "But the oncologist must be more aware of the necessity to vaccinate."

Dr. Loulergue said if cancer patients have influenza, the consequences can be more severe and can delay chemotherapy. Guidelines in France and in the United States recommend vaccination against influenza in all immunocompromised patients. However, the leading reason cited by oncologists for not giving the flu shot was the lack of awareness of recommendations.

In a previous study, one-third of 214 radiotherapy patients (aged 50 years or older) at the University of Pennsylvania, Philadelphia, said they never had an annual flu shot. Only 7% said a cancer specialist discussed vaccinations with them, compared with 44% of general practitioners (FAMILY PRAC-TICE NEWS, Dec. 1, 2007, p. 18).

Studies have also suggested lower influenza vaccination immunogenicity in chemotherapy patients, Dr. Loulergue said. The investigators hope to address immunogenicity in a follow-up study.

In the current study, patients (aged 16-87 years) had received chemotherapy for a median time of 7 months (range, 1-41 months). Indications included colorectal (21%), lung (16%), prostate (15%), sarcoma (8%), and urothelial (7%) cancer.

Vaccinated patients were significantly older than those not vaccinated (70 vs. 59 years) and were more likely to have received a vaccination voucher from the French national health insurance agency (71% vs. 36%). The researchers reported no conflicts of interest.

Immunization Rates Continue to Increase

BY DIANA MAHONEY New England Bureau

ore than three-quarters of the nation's young children have been immunized with the full series of childhood vaccines recommended by the Centers for Disease Control and Prevention.

Data from the 2007 National Immunization Survey showed that all but one vaccine in the recommended series the fourth dose of the DTaP vaccinereached 90% coverage last year, as did the varicella vaccine and the third dose of the seven-valent pneumococcal conjugate vaccine (PCV7), both for the first time, Dr. Julie Gerberding, director of the CDC, reported in a media briefing on the survey results.

In addition, fewer than 1% of the more than 17,000 children born between January 2004 and July 2006 represented in the survey had not received any vaccines in the recommended series by ages 19-35 months, and there were no statistically significant decreases in individual vaccine coverage from 2006 to 2007 (MMWR 2008;57:961-6).

The survey provides coverage estimates for the 4:3:1:3:3:1 immunization series for children aged 19-35 months that includes vaccines for diphtheria, tetanus, and acellular pertussis (DTaP); poliovirus; measles, mumps, and rubella (MMR); *Haemophilus influenzae* type b; hepatitis B; and varicella.

The coverage rates are indicative of



the "ongoing success" of the country's immunization program, said Dr. Gerberding.

"This annual report card is very good. The survey indicates that we are at or above our Healthy People 2010 goal of 90% coverage for each of the vaccines [in the 4:3:1:3:3:1 series], and at 77.4%, we are close to the target of 80% for the combined series."

Relative to the 2006 survey data, coverage levels in 2007 for one dose of the varicella vaccine increased from 89% to 90%, and coverage levels for three or more doses of the PCV7 increased from 87% to 90%, Dr. Gerberding reported. As in previous years, the estimated vaccine coverage rates for the 4:3:1:3:3:1 series varied substantially among states, ranging from a low of 63% in Nevada to a high of 91% in Maryland. Similarly, there was substantial variation among 14 local areas surveyed, ranging from 70% in San Bernardino County, Calif., to 82% in Philadelphia.

Despite regional coverage gaps, said Dr. Gerberding, "vaccine coverage levels were similar across all racial and ethnic groups for the complete series, and there were some important gains." Specifically, among Native American and Alaska Native children, both varicella and fourthdose PCV7 coverage increased significantly, from 85% in 2006 to 95% in 2007 for varicella and from 63% in 2006 to 80% for PCV7 in 2007, she noted.

Dr. Gerberding noted that the recently reported surge of measles outbreaks in the United States, despite the apparent successes in the immunization program, is "a sobering aspect in our failure to protect some children from vaccinepreventable diseases."

"Many of the children affected in these outbreaks were not adequately protected. Some were too young to be fully immunized, and some parents chose not to immunize their children," she said.



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Lab Tests Catch Infection Risk in Febrile Infants

BY BETSY BATES Los Angeles Bureau

HONOLULU — A few simple, inexpensive laboratory tests conducted in the outpatient setting could have identified which febrile infants were likely to have serious bacterial infections and should have been considered for hospital admission, according to the results of a retrospective study of febrile infants.

Dr. Eric W. Glissmeyer and his associates examined the records of 10,316 febrile infant visits to hospitals and emergency clinics and found that in about half of cases (5,221), the infants were evaluated and sent home.

Of those, 63 (1%) were admitted within 3 days of discharge, 23 of them for serious, culture-confirmed bacterial infections, Dr. Glissmeyer said at the annual meeting of the Pediatric Academic Societies.

Bacteremia (10 cases), urinary tract infection (7 cases), bacterial meningitis (5 cases), and salmonella gastroenteritis (1 case) were among the missed cases. Most of the cases were life threatening, he said.

Among the 23 cases, just 1 infant had received a complete blood count and a urinalysis with results within normal limits at the initial presentation, conferring a low risk of a serious bacterial infection, reported Dr. Glissmeyer, who was at the University of Utah, Salt Lake City, at the time of the study.

Another 12 (52%) of these 23 infants were discharged home despite being at high risk for a serious bacterial infection. Risk was based on laboratory results and was considered high if an infant had a white blood cell count of fewer than 5,000 cells/mcL or more than 15,000 cells/mcL; an absolute band count of greater than 1,500/mm³; and/or more than 10 white blood cells per high-powered-field in a urine sample.

Infants with laboratory results meeting these high-risk criteria had more than a twofold increased likelihood of being readmitted within 3 days for any reason, and for a serious bacterial infection specifically.

No laboratory tests were performed in 10 febrile infants who went on to be hospitalized with a serious bacterial infection within 3 days, said Dr. Glissmeyer, now at Children's Hospital in Boston.

Consensus guidelines issued in 1993 for the management of febrile infants (Ann. Emerg. Med. 22:1198-210) and criteria developed by several institutions on the basis of prospective studies routinely recommend a CBC and a urinalysis to detect highrisk infants aged between 1 and 90 days.

Many institutions routinely admit all febrile infants younger than 28 days because clinical appearance alone is a poor determinant of risk for serious bacterial infection for febrile infants, said Dr. Glissmeyer.

"Febrile infants with a missed serious bacterial infection are at risk for serious morbidity and mortality," he added. "Simple laboratory testing, including a CBC and a urinalysis, should be obtained before the decision is made to manage [a febrile infant] as an outpatient."