LETTER TO THE EDITOR

Survey of vaccine administration to splenectomized patients: Are guidelines being followed?

To the Editor:

Asplenic patients are at risk for developing overwhelming postsplenectomy infection (OPSI), in particular with encapsulated organisms, such as Streptococcus pneumoniae, Neisseria meningitidis and Haemophilus influenzae type B (Hib) (1). Vaccination against these organisms substantially decreases the risk of infection, and is considered the standard of care in these patients (2). The sixth edition of the Canadian Immunization Guide (3) recommends polysaccharide pneumococcal vaccine for all asplenic individuals who have not been previously immunized. A single booster five years after initial vaccination is recommended. Individuals should also receive Hib conjugate vaccine and immunization for meningococcal disease (3).

Despite these guidelines, studies have reported low adherence to the recommendations. Ramachandra et al (4) reported that 72% of 76 splenectomized patients received the pneumococcal polysaccharide vaccine, 59% received Hib and only 39% received the meningococcus vaccine (4). A Canadian survey (5) reported that 111 of 164 (68%) patients received the pneumococcal vaccine during hospitalization for splenectomy, only four received Hib and two received the meningococcal vaccine. A Scottish study (6) of 974 splenectomized patients reported data on vaccination status for 73% of patients, with only 47% of patients having received all three vaccinations.

We undertook a review to determine whether splenectomized patients at our institution were receiving the appropriate vaccinations and were being counselled about the risk of OPSI. All patients who underwent a splenectomy between January 2002 and December 2004 at the Queen Elizabeth II Health Sciences Centre in Halifax, Nova Scotia, were included. Information was collected on age, sex, indication for splenectomy, receipt, timing and documentation of vaccinations, documentation of the surgical discharge summary including report of the splenectomy, documentation of administered vaccines, recommendations for future vaccines, recommendations for Medic Alert bracelets and counselling about the risk of OPSI. In addition, a letter was sent to general practitioners of living patients requesting details about the administration of vaccines outside the hospital if these data were not available from hospital records. If no response was received after the first letter was mailed, a second letter was mailed six weeks later. If patients had not received all recommended vaccinations, a subsequent letter was sent to the general practitioner so that they could arrange for vaccine administration according to the current standard of care.

Of 70 patients reviewed, 28 (40%) were male and were between 17 and 84 years of age (median age 53 years). The most common indication for splenectomy was idiopathic thrombocytopenic purpura (n=28). Other indications included trauma (n=13), hemolytic anemia (n=7), thrombotic thrombocytopenic purpura (n=3) and other causes (n=19). Five patients who had died were excluded from the analysis because of incomplete information.

The response rate from general practitioners was 94%. Vaccination had been received by 91% of patients for S pneumoniae, 75% for N meningitidis and 68% for Hib. However, only 27% of surgical discharge summaries included documentation of vaccine administration or recommendations for future vaccinations. Only 6% of discharge summaries documented the risk of infection postsplenectomy and that recommendations were given to patients about this risk.

Vaccination rates at our institution are better than previous reports. However, some patients are still not receiving the recommended vaccinations, particularly for Hib and N meningitidis. Implementation of an institutional standing order for the administration of vaccines may improve vaccination rates and should be evaluated. Although our vaccination rates are relatively high, the documentation regarding vaccinations, recommendations for follow-up vaccination and documentation about the risk of infection in the surgical discharge summary was lacking for most patients. Further studies are planned in our institution to assess the usefulness of a ‘checklist’ to improve these deficits.

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REFERENCES