Asplenic Patients’ Knowledge of Prophylactic Measures Against Severe Infections

We performed a cross-sectional study to examine splenectomized patients’ knowledge of prophylactic measures against severe infections. Danish guidelines for the long-term care of patients after splenectomy have been proposed, and the measures include sufficient immunization against infection due to *Streptococcus pneumoniae*, self-treatment with penicillin when fever develops, and carriage of a Splenectomy Medic Alert Card by all splenectomized persons [1]. A combination of these measures seemed to be effective in preventing pneumococcal sepsis in splenectomized patients [2]. Primary pneumococcal vaccination is protective for 10 years; a determination of the level of antibody to *S. pneumoniae* should be made at the end of this period. It has been recommended that determination of antibody levels be done before revaccination is scheduled to avoid painful local reactions in the event of high antibody levels; if antibody levels are high, revaccination is postponed for a specified number of years [3].

We identified all 561 patients splenectomized in a Danish county (485,000 inhabitants) between 1984 and 1993 through the county’s Central Operation Activity Register (“Patientsystemet”) as well as through the histology registers serving the local hospitals. The 235 patients who were still alive in 1995 received a questionnaire. One hundred seventy-five (74%) of these patients completed the questionnaire. The indications for splenectomy were hematologic disease (29% of patients), trauma (32%), incidental (i.e., to clear a malignant tumor, 13%), accidental (due to inadvertent surgical trauma, 18%), and other reasons (8%). The median age at the time of splenectomy was 43 years (range, 4–85 years), and 52% of the patients were male.

Fifty-eight percent of the patients could state that they had received pneumococcal vaccine in relation to the splenectomy (during the hospital stay or within a few weeks after leaving the hospital), 5% could state they had not received the vaccine, and 37% had no knowledge of possible vaccination. Only 13% of these patients knew the number of years they were protected by the vaccine (i.e., they knew the time of the next scheduled antibody determination before revaccination). Only 16% had been provided with penicillin and were aware of the need to use it in the event that they developed fever. Fifty percent of the patients reported that they would not spontaneously tell an uninformed emergency department doctor (covering 80% of the time) about their splenectomies. Nine percent knew of the existence of the Splenectomy Medic Alert Card recommended in 1982 and in use since 1990. Possible or definite allergy to penicillin was reported by 14% of the patients.

Our study was not designed to differentiate between the patients’ levels of education and lack of knowledge or between physicians’ standards of practice, but we believed that the study was necessary to determine an estimate of the number of patients who are aware of prophylactic measures against infection after splenectomy. We found that asplenic patients were unsatisfactorily informed about pneumococcal immunization and simple, yet important, measures for preventing serious infections. Our findings suggest that it might be both possible and worthwhile to trace all asplenic patients and provide them with written information and an invitation to discuss long-term care with their general practitioners.

Claus Rasmussen, Per Ejstrud, Jesper B. Hansen, and Helle B. Konradsen

Department of Internal Medicine and Hematology, Gastrointestinal Surgery, and Clinical Chemistry, Aalborg Hospital, Aalborg, and *Streptococcus Unit, Division of Clinical Microbiology, Statens Seruminstitut, Copenhagen, Denmark*

References