GUIDELINES FOR MANAGEMENT OF ASPLENIC PATIENTS

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INTRODUCTION

People with an absent or dysfunctional spleen are at increased risk of severe infection. The risk is greater in the first 2 years following splenectomy, but persists throughout life. The commonest infection is *Streptococcus pneumoniae*, but other organisms also present significant risks, e.g. *Haemophilus influenzae type b* (Hib) and *Neisseria Meningitidis*.

In January 1994, the Chief Medical Officer of the Department of Health wrote to all doctors regarding the consequences of splenectomy\(^1\). Further advice was issued in March 2001\(^2\).

AIM OF POLICY

To ensure that asplenic/hyposplenic patients are optimally managed to prevent infections to which they are particularly susceptible.

ACTION TO BE TAKEN

The following procedures should be followed for all asplenic/hyposplenic patients:

1. The medical records should be clearly marked, highlighting asplenic status and the patient should carry a card or wear a bracelet/necklet stating the risk of infection.

2. VACCINATION. The following is recommended:

   2.1 **Pneumococcal vaccine (23-valent polysaccharide vaccine).** A single injection (0.5 ml SC or IM), with boosters at 5-10 year intervals. Should be given 2 weeks before an elective splenectomy. If the spleen is removed in an emergency, vaccination should be given 2 weeks post-operatively, unless the patient leaves hospital before this time, in which case the vaccination should be given before discharge.

   Children under 2 years cannot have the polysaccharide vaccine due to lack of efficacy at this age and should have the new conjugate pneumococcal vaccine\(^3\),\(^4\). Doses should be as follows in previously unvaccinated children:

   - **6 months old or less:** three doses, each of 0.5ml, the first dose usually given at 2 months of age and with an interval of at least 1 month between doses. A fourth dose is recommended in the second year of life.

   - **Previously unvaccinated older infants and children:**
     
     - **7–11 months:** two doses, each of 0.5ml, with an interval of at least one-month between doses. A third dose is recommended in the second year of life.
     
     - **12–23 months:** two doses, each of 0.5ml, with an interval of at least 2 months between doses.
After their 2nd birthday, they should receive a single dose of 23-valent pneumococcal polysaccharide vaccine (at least 1 month should be left between the conjugate vaccine and the polysaccharide vaccine).

2.2 **Hib (Haemophilus influenzae type b) vaccine.** A single dose is recommended for asplenic people of all ages at the same time as pneumococcal immunisation.

2.3 **Meningococcal C conjugate vaccine.** Should be given to patients undergoing splenectomy, at the same time as pneumococcal vaccine. Should also be given to any asplenic/hyposplenic patient who has not been immunised previously.

2.4 **Influenza vaccine.** Should be given annually in the autumn.

3. **ANTIBIOTICS**

The first 2 years after splenectomy is the period of highest risk, so antibiotic prophylaxis should be given for that time and is also advisable for children up to 16 years of age.

Recommended dosages:

- Adult: phenoxymethyl penicillin 500 mg b.d
- Child 6-12: “ 250 mg b.d
- Child <6: “ 125 mg b.d

Erythromycin should be used in penicillin-allergic patients.

When long-term prophylaxis is finished, the patient should be given a small supply of suitable antibiotic to begin immediately if they have a febrile illness.

In patients who are immunosuppressed (e.g. haematology patients, patients on chemotherapy etc) prophylaxis should be continued for the period of immunosuppression and occasionally may be needed lifelong. This should be decided by the Consultant responsible for their care.

4. **FOREIGN TRAVEL**

Malaria poses more of a threat to people without a functioning spleen. The importance of taking anti-malarial prophylaxis and other precautions (insect repellents, correct clothing and mosquito screens at night) should be emphasised.

Asplenic/hyposplenic patients travelling to countries in which Group A meningococcal disease is the common type should be given meningococcal Groups A and C polysaccharide vaccine or quadrivalent (A, C, W, Y) vaccine.

“I have no functioning spleen” cards are available for patients from the Microbiology Department (Ext 3540), or can be downloaded from the Department of Health website (www.dh.gov.uk). A patient information leaflet can also be downloaded from the same site.
REFERENCES:

1 Department of Health. Asplenic patients and immunisation. C.M.O.’s Update 1994; 1:3.

