

## **SPLENECTOMISED PATIENTS AND THOSE WITH AN AFUNCTIONAL SPLEEN**

### **Splenectomised Patients and Those With an Afunctional Spleen**

Patients with no spleen or functional asplenia have a significantly increased risk of overwhelming infection, particularly with:

- Encapsulated organisms – *Streptococcus pneumoniae* (60%), *Haemophilus influenzae* type b and *Neisseria meningitidis*;
- Less commonly with – *Escherichia coli*, malaria, babesiosis (rare tick-borne infection) and *Capnocytophaga canimorsus* (dog bites).

Immunisation reduces but does not eliminate the risk of infection.

#### **Antibiotic prophylaxis:**

- Should be offered lifelong antibiotic prophylaxis following splenectomy; however, if compliance is an issue, this can be reduced:-
  - Adults must receive prophylactic antibiotics for 2 years post-splenectomy. Children should receive antibiotic cover until 16 years of age (NB. Older children should still receive a minimum 2-year course).
- Lifelong antibiotic prophylaxis is always advised for all patients considered at continued high risk of pneumococcal disease, including:
  - Patients under 16 or over 50 years of age
  - Patients who have an inadequate serological response to pneumococcal vaccination.
  - Patients with a history of previous invasive pneumococcal disease.
  - Patients undergoing splenectomy for an underlying haematological malignancy, particularly in the context of ongoing immunosuppression.
- Education of the patient about their life-long increased risk of overwhelming infection and the need for malarial prophylaxis when they travel is important.
- They should be told to seek immediate medical attention if they have fevers, shivers or feel unwell, are bitten or scratched by an animal, and should be issued with an alert card. They can also sign-up for 'MedicAlert' bracelets.

#### **Emergency antibiotics:**

- If compliance is a problem following the two-year prophylaxis course, an emergency supply of oral amoxicillin or if allergic oral clarithromycin can be prescribed for use at home prior to seeking urgent medical attention. This should be kept at home, taken on holiday and used immediately should they develop any signs of infection. Patients and their carers should regularly be reminded of the ongoing risk of infection and encouraged to seek medical advice if the patients become febrile ( $\geq 38^{\circ}\text{C}$ ) and/or develop symptoms of infection
- If the patient becomes acutely unwell and is not penicillin-allergic, prompt administration of cefotaxime for meningococcal disease can be given, and rapid referral is recommended.

For the most up-to-date information about vaccination schedules, please refer to Immunisation against Infectious Diseases – the "Green Book":

[Immunisation of individuals with underlying medical conditions: the green book, chapter 7 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/immunisation-against-infectious-diseases-the-green-book)

## Splenectomised patients

2.2 Last reviewed: 07/07/2021 Review date: 19/08/2024

### Oral Antibiotic Prophylaxis

Drug	Dose	Duration of Treatment
Phenoxyethylpenicillin (Penicillin V)	1–11 months: 62.5mg twice daily 1–4yrs: 125mg twice daily ≥5yrs and adult: 250mg twice daily	Long-term (at least 2 years post-splenectomy)
<b>If penicillin allergic:</b>  Adults – <a href="#">Clarithromycin</a>  Children – <a href="#">Erythromycin</a>  Pregnant – <a href="#">Erythromycin</a>	Adults: 250mg twice daily  1–23 months: 125mg twice daily 2–7yrs: 250mg twice daily 8–17yrs: 500mg twice daily  500mg twice daily	Long-term (at least 2 years post-splenectomy)

**Oral Emergency Antibiotic Supply:** immediately start taking a therapeutic course of antibiotics and seek urgent medical attention.

Drug	Dose	Duration of Treatment
Amoxicillin  If suspension, supply as dry powder for reconstitution.	Child 1–11mth: 125mg three times daily  1-4yrs: 250mg three times daily  5-11yrs: 500mg three times daily  12-17yrs and adults: 500mg–1g three times daily	7 days
<b>If penicillin allergic:</b>  <a href="#">Clarithromycin</a>  If suspension, supply as dry powder for reconstitution.	Child, 1 month to 11 years, based on body weight:  Up to 8 kg: 7.5mg/kg twice daily 8 – 11 kg: 62.5mg twice daily 12 – 19 kg: 125mg twice daily 20 – 29 kg: 187.5mg twice daily 30 – 40 kg: 250mg twice daily  Child 12–17yrs: 250mg–500mg twice daily. Could use higher dosing in severe infection if needed.  Adults: 500mg twice daily	7 days

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Version	Author(s)	Date	Changes
V2.1	Shary Walker, Interface and Formulary Pharmacist	19/08/21	1. Updated children's dosing in alignment with BNF age bands.
V2.2	Shary Walker	06/07/23	1. Direction abbreviations are written in full 2. Clarithromycin for penicillin allergy emergency alternative 3. Consultations: Dr Viv Weston and Dr Anisha Chudasama