

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.
 - Older children should still receive a minimum 2 year course.
- Lifelong antibiotic prophylaxis is always advised for all patients considered to be 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.
- Patients 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](#).
- Patients can also sign-up for '[MedicAlert](#)' bracelets.

Emergency antibiotics:

- If compliance is a problem following the two-year prophylaxis course, an emergency supply of an oral antibiotic 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 patients 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 patient becomes febrile ($\geq 38^{\circ}\text{C}$) and/or develops 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 up-to-date vaccination schedules, refer to [Immunisation against Infectious Diseases; the Green Book, chapter 7](#).

Oral Antibiotic Prophylaxis:

| Antibiotic ¹ | Dose | Duration |
|---|---|---|
| Phenoxymethylpenicillin | Child 1–11mth: 62.5mg twice a day Child 1-4yrs: 125mg twice a day Adult and child ≥ 5yrs: 250mg twice a day | Long-term (at least 2 years post-splenectomy) |
| In penicillin allergy: Clarithromycin ² Erythromycin ² (children and pregnant women) | Adults: 250mg twice daily Child 1-23 months: 125mg twice a day Child 2-7yrs: 250mg twice a day Adult and child ≥ 8yrs: 500mg twice a day | Long-term (at least 2 years post-splenectomy) |

¹ See [BNF](#) and [BNFC](#) for appropriate use and dosing in specific populations, e.g., hepatic, or renal impairment, pregnancy, breastfeeding.

² Withhold statins whilst on clarithromycin/erythromycin course.

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

| Antibiotic ¹ | Dose | Duration |
|---|---|----------|
| Amoxicillin If suspension, supply as dry powder for reconstitution. | Child 1–11mth: 125mg three times daily Child 1-4yrs: 250mg three times daily Child 5-11yrs: 500mg three times daily Adult and child ≥12yrs: 500mg–1g three times daily | 7 days |
| In penicillin allergy: Clarithromycin ² If suspension, supply as dry powder for reconstitution. | Child 1 month-11 years: <ul style="list-style-type: none"> Under 8 kg: 7.5mg/kg twice a day 8-11 kg: 62.5mg twice a day 12-19 kg: 125mg twice a day 20-29 kg: 187.5mg twice a day 30-40 kg: 250mg twice a day Child 12–17yrs: 250mg–500mg twice daily. Adults: 500mg twice daily | 7 days |

¹ See [BNE](#) and [BNFC](#) for appropriate use and dosing in specific populations, e.g., hepatic, or renal impairment, pregnancy, breastfeeding.

² Withhold statins whilst on clarithromycin/erythromycin course.