

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 meningitides*.
- 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.

For up-to-date vaccination schedules, refer to [Immunisation against Infectious Diseases: the Green Book, chapter 7.](#)

Antibiotic prophylaxis:

Following splenectomy, patients are at risk of overwhelming infection. The length they remain at risk is unknown.

Susceptibility to infection may be greatest in the first few years following splenectomy but persists lifelong. Compliance with lifelong prophylactic antibiotics can also be challenging for patients.

➤ **All patients should be offered lifelong antibiotic prophylaxis following splenectomy.**

- If compliance is an issue, this can be reduced following a discussion with the patient regarding the risks and benefits of lifelong antibiotics
 - Adults **must** receive prophylactic antibiotics for **1-3 years post-splenectomy**.
 - Children should receive antibiotic cover until **5 years** of age (ensuring at least two complete years of prophylaxis is given).
 - Children over 5 years of age may be considered for discontinuation of antibiotics prophylaxis with consideration of risks and benefits of lifelong antibiotics, if they have received pneumococcal immunisation and do not have a history of severe pneumococcal infection.

The decision to discontinue after the above suggested period should be re-discussed periodically thereafter. If the decision is to remain off prophylaxis, an emergency supply of antibiotics should be considered (see below).

- **Lifelong antibiotic prophylaxis is always advised** for all patients considered to be at continued high risk of pneumococcal disease, including:
 - Patients **under 5 or over 50 years of age** (The risk of pneumococcal infection increases with increasing age, and it may be advisable to restart penicillin prophylaxis over the age of 50 years).
 - 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.
- All animal bites and scratches need to be treated promptly to reduce the chance of infection from *Capnocytophaga canimorsus*, which can lead to fulminant sepsis.
- Patients should be told to seek immediate medical attention if they have fevers, shivers or feel unwell and should be issued with an [alert card](#).
- Patients can sign-up for '[MedicAlert](#)' bracelets.

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 1-3 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 1-3 years post-splenectomy)
If all above options are unsuitable, azithromycin (oral) 250mg od can be considered. If all choices are unsuitable, discuss with microbiology. In confirmed penicillin allergic patients requiring statin treatment, review on a case-by-case basis and consider changing statin to rosuvastatin or change the antibiotic.		
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.		

Emergency antibiotics:

- If compliance is a problem following the 1–3-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 (≥38°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.

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 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 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.		