

Appendix 2: Guidelines for Management of Patients with an Absent or Dysfunctional Spleen (Adults)

Immunisation

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HSE *Immunisation Guidelines for Ireland* are regularly updated with online only updates on the RCPI website:

<https://www.rcpi.ie/Healthcare-Leadership/NIAC/Immunisation-Guidelines-for-Ireland>

**Check Chapter 3 and 5a: *Immunisation of immunocompromised persons and COVID-19* to ensure you have the most up to date guidance.**

**NB:** Ideally give required vaccinations at least **two weeks**, and preferably **4 weeks or more**, before splenectomy.

For **emergency splenectomy** or if prior vaccination is overlooked or incomplete, administration at least **two weeks after** splenectomy is recommended.

However, if waiting until 2 weeks post surgery (to optimise immune response to vaccine) take care that vaccination is not missed entirely, especially if the patient is being discharged in the interim.

If concerned that the patient may not present to the GP for vaccination or for any other reason, vaccination prior to discharge may merit consideration, even if it is before the required 14 day gap.

In general, wait at least 3 months after **immunosuppressive chemotherapy or radiotherapy** (or give two weeks before such treatment).

Where a patient has had a splenectomy in the past, and has not received the required vaccines at the time, they should be immunised at the earliest possible opportunity.

When the patient is being sent home, make sure the **GP is fully informed** about any vaccines required, and the date on which they are due.

A **patient information leaflet** is also available from the link

<https://www.gov.uk/government/publications/splenectomy-leaflet-and-card>

**Recommended additional vaccines for adults with asplenia & hyposplenia.**

Please check [chapter 3](#) HSE Immunisation Guidelines for Ireland to ensure you have the most up to date guidance on recommended additional vaccines for adults with functional or anatomical asplenia & hyposplenia.

Check routine immunisation from birth and boosters have been given

Visit <https://www.rcpi.ie/Healthcare-Leadership/NIAC/Immunisation-Guidelines-for-Ireland> for more information.

**Prophylactic Antibiotics for patients with asplenia & hyposplenia**

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- Recommendations regarding the duration of antibiotic prophylaxis for asplenia and hyposplenia vary. **The risk for invasive pneumococcal infection is elevated throughout life but highest for those <16 and >50 years of age.**
- **All patients should receive prophylactic antibiotics for a minimum of one to two years post splenectomy.**
- Lifelong prophylaxis is recommended for **high-risk patients**. See risk factors below.
- Risk assessment is recommended for **low risk patients**. Such patients should be counselled regarding the risks and benefits of lifelong antibiotics and may choose to discontinue prophylaxis. Prophylaxis should only be discontinued if the patient is fully immunised and education and counselling is given regarding the risks of pneumococcal, meningococcal and *Haemophilus B* infection and the need for prompt early management of febrile illness.

**Risk factors** associated with high risk of invasive pneumococcal disease in hyposplenism include:

- Immediate post-operative period
- Age less than 16 or greater than 50 years
- Inadequate serological response to pneumococcal vaccination
- A history of previous invasive pneumococcal disease
- Splenectomy for underlying haematological malignancy particularly in the context of on-going immunosuppression
- Poor clinic attendees
- Patients with sickle cell disease with surgical splenectomy

#### Prophylactic Antibiotics for Adult Patients with an Absent or Dysfunctional Spleen

Infection	First line antibiotics	If penicillin allergy	Comment
Prophylaxis for patients with an absent or dysfunctional spleen	Phenoxymethylpenicillin 666mg (Calvepen <sup>®</sup> ) every 12 hours or Amoxicillin PO 500mg every 24 hours	Erythromycin PO 250 to 500mg every 24 hours	Oral absorption of phenoxymethylpenicillin is limited and affected by a number of variables. For emergency self initiated therapy of a suspected systemic infection treatment doses of amoxicillin are preferable.
Treatment doses	Amoxicillin PO 500mg to 1g every 8 hours	Erythromycin PO 500mg to 1g every 6 hours	

Amoxicillin advantages: absorption not affected by food, broader spectrum

A supply of treatment doses of amoxicillin should be kept at home (and on holidays) and used immediately should infective symptoms of raised temperature or malaise develop. In such a situation, the patient should seek urgent medical attention

### Patient Education & Documentation

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- Patients developing infection, despite measures, must be given systemic antibiotics and admitted urgently to hospital.
- Patients should be given [written information](#) and carry a card to alert health professionals to the risk of overwhelming infection. Patients may wish to invest in alert bracelet or pendant.
- Patients should be educated as to the potential risks of overseas travel, particularly regarding malaria and unusual infections, for example resulting from animal bites. Co-amoxiclav (or appropriate alternative in penicillin allergy) is recommended after animal bites.
- The front cover of **patient records should be clearly labelled** to indicate the underlying risk of infection from absent or dysfunctional spleen.
- **Vaccination and revaccination status** should be clearly and adequately **documented**.
- It may be appropriate to advise people that they are at risk of infection with the agent associated with red water fever in cattle and that they should take precaution against tick exposure (wear protective clothing in tick infested areas) when walking in the countryside.

### References

#### References ■

1. Immunisation Guidelines for Ireland

<https://www.rcpi.ie/Healthcare-Leadership/NIAC/Immunisation-Guidelines-for-Ireland>

- Chapter 3 – Immunisation of immunocompromised persons (updated May 2023)

-Chapter 5a – COVID-19 (updated September 2023)

- Chapter 16 – Pneumococcal infection (updated July 2018)

- Chapter 13 – Meningococcal infection (updated October 2019)

2. Davies et al. Review of guidelines for the prevention and treatment of infection in patients with an absent or dysfunctional spleen: Prepared on behalf of the British Committee for Standards in Haematology by a Working party of the Haemato-Oncology Task Force [British Journal of Haematology 2011;155:208-317](#)

3. IDSA Clinical Guidelines for Vaccination of the Immunocompromised Host [2013](#)

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