Vaccination & Antibiotic Recommendations for Adult Patients with an Absent or Dysfunctional Spleen

Vaccines

As immunosuppressed individuals, this group of patients are at risk from certain infections and should be offered additional vaccinations. Guidance is obtained from Chapter 7 of The Green Book: Immunisation against Infectious Disease and is summarised below.

<table>
<tr><th>Up to 2 weeks pre-op (elective patients)
or
2 weeks post-op (emergency patients)</th><th>4 weeks later</th><th>Yearly</th><th>5 yearly</th></tr>
<tr><td>Meningococcal Group B (Bexsero) 1st dose</td><td>Meningococcal Group B (Bexsero) 2nd dose</td><td rowspan="3">Influenza vaccine</td><td>Pneumococcal polysaccharide vaccine (PPV23) booster</td></tr>
<tr><td>Pneumococcal polysaccharide vaccine (PPV23)</td><td></td><td></td></tr>
<tr><td>Meningococcal conjugate ACWY vaccine (Nimenrix)</td><td></td><td></td></tr>
<tr><td colspan="4">Vaccinations should be delayed if the patient has an active infection</td></tr>
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Although additional vaccination against Haemophilus influenzae type b (Hib) used to be recommended for asplenic patients, current control of Hib is excellent because of a long-standing successful vaccination programme in children and the risk of Hib disease is extremely low. Therefore, additional Hib vaccination is no longer recommended.

Vaccinations can be administered on the ward during admission or in community via referral to the Tayside Vaccination Service. All patients will require a referral to the Tayside Vaccination Service to ensure they are added to the patient list for yearly flu vaccines and 5 yearly PPV23 boosters. Referrals can be made by emailing tay.vaccinationservice@nhs.scot with the patient details, the vaccinations required and the dates they are due. The email should be copied to the patient's consultant so they receive the confirmation email once the vaccinations have been given.

Antibiotic prophylaxis

The aim of prophylaxis is to reduce the risk of infection, in particular with *S. pneumoniae*, *H. influenzae*, *N. meningitides*.

Prophylaxis is not fully reliable but it is ideally taken lifelong especially in high risk patients:

- <16 years or >50 years
- Inadequate serological response to pneumococcal vaccination
- History of invasive pneumococcal disease
- Splenectomy for underlying haematological malignancy particularly in the context of ongoing immunosuppression

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Antibiotics should be started immediately post-op as per the table below.

Standard prophylaxis		Penicillin allergy prophylaxis	
Oral prophylaxis	**IV prophylaxis (when oral route not available)**	**Oral prophylaxis**	**IV prophylaxis (when oral route not available)**
Phenoxymethylpenicillin 250mg twice daily	Benzylpenicillin 1.2g twice daily	Erythromycin 500mg twice daily	Clarithromycin 500mg twice daily

Patients not at high risk should be counselled regarding the risks and benefits of lifelong antibiotics and may choose to continue or discontinue prophylaxis. Patients may be given a course of antibiotics to keep at home if they choose not to take prophylaxis or if there may be a delay in accessing medical attention. Amoxicillin 1g three times a day or Doxycycline 100mg twice daily can be given in these cases to start taking if they become systemically unwell. Patients should be advised to get treatment urgently for any bites, such as animal bites, as the antibiotics given for prophylaxis or to keep at home will not provide adequate antibacterial cover.

Splenectomy Cards

All patients should be given a splenectomy patient information leaflet and patient record card. These are stocked on Ward 11 Ninewells Hospital or are available to order via the following link:
https://www.gov.uk/government/publications/splenectomy-leaflet-and-card?ghgh

Further Information

For further information, refer to Chapter 7 of The Green Book: Immunisation Against Infectious Disease
https://www.gov.uk/government/publications/immunisation-of-individuals-with-underlying-medical-conditions-the-green-book-chapter-7

References

Davies JM, Lewis MP, Wimperis J et al. (2011) 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. Br J Haematol 155(3): 308-17.

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