NHS Lothian

LOTHIAN PRESCRIBING BULLETIN

Supporting prescribing excellence - informing colleagues in primary and secondary care

Issue 105 January 2021

Pneumococcal immunisation and the spleen

The Green Book includes guidance on immunisation of individuals with underlying medical conditions. Some medical conditions increase the risk of complications from infectious diseases, and children and adults with such conditions should be immunised as a matter of priority. These groups may also require additional vaccinations or additional doses of vaccines to provide adequate protection. Revised recommendations on immunisation of individuals with asplenia, splenic dysfunction or severe immunocompromise are detailed in Chapter 7 of the Green Book. See in particular box 7.1 which details all vaccines required, ie. not just pneumococcal polysaccharide vaccine (PPV).

- All patients with coeliac disease (unless known to have splenic dysfunction) should receive one dose of PPV23; these patients have been identified as a priority.
- A 5-year boost of PPV23 is needed if asplenic/splenic dysfunction (other than patients with coeliac disease).
- Shortages of PPV vaccine are frequent and priority should be given to those at highest risk (not the usual 65+ cohort) with particular priority to newly diagnosed patients; administration of 13-valent pneumococcal conjugate vaccine (PCV13) is not a suitable alternative.

The NHS Lothian Immunisation Co-ordinating Group (LICOG) consensus statement provides practical guidance in interpreting the Green Book for patients with coeliac disease. Patients should have their status (hyposplenic or not) clarified at their initial diagnosis by the coeliac service. Whether a patient is hyposplenic or not has been the source of much confusion. Most unimmunised adult coeliac patients likely only need **ONE** vaccination with 23-valent pneumococcal polysaccharide vaccine (PPV23) based on current evidence. All newly diagnosed coeliac patients are advised to check they have had immunisation and if not, to consult their GP.

The NHS Lothian team are in receipt of funding from Scottish Government to answer the question of who is truly hyposplenic and how that can practically be assessed, the immune response to PPV23 immunisation in adults and the ongoing need for boosters. Coeliac UK recommends that everyone receives the PPV vaccination every five years as a cover-all. Your patients may have done so and may ask about receiving this every five years. But, NHS Lothian recommendations from LICOG as above are that only patients who are deemed to have hyposplenism need more than one PPV23 vaccination. There is real debate about how to assess patients and the update to Chapter 7 is a welcome clarification.

The Antimicrobial Management Team provide guidance on Surgical Antibiotic prophylaxis in Adults and Splenectomy and Dysfunctional Spleen Prophylaxis in adults and children.

References

- **Pneumococcal disease. Health Protection Scotland**
- **Pneumococcal immunisation: the green book, chapter 25**

Thanks to Dr Peter Gillett, Consultant Paediatrician and Dr Lorna Willocks, Consultant in Public Health, for contributing this article.

Keeping up with medicine shortages

Medicine shortages and supply problems are a hot topic at the moment, given the COVID-19 pandemic and impending EU exit. During the pandemic there have been a number of logistical problems which have affected the supply chain of our medicines and have caused strain on primary care and community pharmacy supply. These have included issues with global supply chains, imports, and also delays in UK deliveries due to COVID-19 outbreaks in main distribution depots. During this period, the main goal was always to ensure that patients in NHS Lothian continued to receive their medicines in a timely manner.

The NHS Lothian Primary Care Medicine Shortages Team forms part of the Primary Care Central Services Team which comprise Medicine Shortages, Prescribing Efficiency & Analysis Technical Team (PEAT), Scriptswitch, Specials and Cold Chain Management. A number of resources are utilised to ensure information is up to date and to highlight potential patient issues when a medicine is in short supply. Government updates from the pharmaceutical industry regarding imminent medication supply issues, published as Medicine Supply Alert Notices (MSAN) and drug alerts are an important source of information, and there is regular liaison with drug manufacturers. The team sense check these documents and carry out prescribing data searches where appropriate to identify practices and patients that may be affected.

In the event that a potential medicine supply issue is identified, there are number of resources that can be checked to confirm whether this is a known problem in primary care.

Healthcare professionals in both primary and secondary care can report any new shortages which they have identified via NHS Lothian Medicines Shortages

A separate intranet page for shortages in secondary care is in development and should be available in 2021

Primary care and community pharmacy shortages

All information received regarding medicine supply issues is displayed in the form of the Primary Care and Community Pharmacy Shortages table and can be accessed via the NHS Lothian intranet.

Out of Stock Bulletin

The Out of Stock Bulletin is distributed to the Primary Care Team on a monthly basis and provides an update on the latest MSANs, discontinued products and products returning to available status.

MSANs and Drug Alerts

Scottish Government Health and Social Care Directorates website publishes the latest MSAN and drug alert documents released by the government.

Scriptswitch

The Scriptswitch team use the prescribing support tool to keep users up to date with the latest medicines shortage information through informative pop up messages at the point of prescribing. These messages may contain information of the shortage, links to more data sources and switches if appropriate.

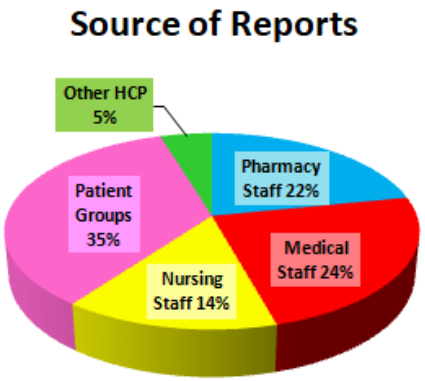
In the event that the above sources do not provide sufficient information about the identified shortage, we welcome enquiries to the Medicine Shortages team mailbox. The pharmacy teams in general practice are also available for advice when required.

Thanks to Alison McCulloch, Specialist Clinical Pharmacist and John Hogan, Prescribing Support Technician, for their contribution.

Key observations from Annual Report 2019-20

In **Scotland,** a total of 1432 Yellow Card (YC) reports for suspect adverse drug reactions (ADRs) were submitted between April 2019 and March 2020**.** This is consistent with previous years.

- NHS Lothian submitted the most YC reports, compared to any other health board in NHS Scotland. Well done Lothian!
- But **YC reporting by health care professionals is still on the decline,** mainly due to a decrease in reporting from doctors in both primary care and secondary care. The good news is that reporting by hospital nurses, hospital pharmacists and other healthcare professionals has increased.
- We also have very vigilant patient reporters in Scotland—**patients, parents and carers are our highest reporting group** (accounting for 35% of the total YC reports for 2019/20).



- **Glatiramer** was the most reported suspect medicine (excluding vaccines). The majority of these reports involved non-serious ADRs, and were submitted by nurses; 31% involved site reactions. This may be due to manufacturers' instructions that patients should be supervised by a healthcare professional the first time they self-inject glatiramer, and for 30 minutes afterwards.
- **Coincidence or pharmacovigilance?** A number of YC reporting patterns coincided with important Drug Safety Updates in 2019/2020. For example, we saw a number of reports for neuropsychiatric reactions with montelukast, including aggression, anxiety, obsessive compulsive disorder, and tics. We also saw reports of diabetic ketoacidosis or euglycaemic diabetic ketoacidosis with SGLT2 inhibitor antidiabetic medicines, and musculoskeletal and nervous systems disorders with quinolones.
- Suspected side effects to vaccines, medicines, or medical devices used in **coronavirus** treatment should be reported via the **Coronavirus Yellow Card reporting site** to ensure safe and effective use.

Thanks to Tracy Duff, Lead Pharmacist, Medicines Information, for her contribution.

Too herb to handle?

The Specialist Pharmacist Service, in collaboration with the UK Medicines Information Service, has recently developed a document to help guide healthcare professionals (HCPs) in dealing with enquiries about drug interactions involving complementary and alternative medicine (CAM) including herbal medicines, dietary supplements and homeopathic remedies. Their aim was to aid in providing safe, effective and timely answers whilst adopting a standardised approach.

This valuable document outlines the essential background questions to ask the patient, the appropriate resources to use and tips on how to rationalise advice being offered. A link is provided to help access free resources which can be used to obtain information about a wide range of CAMs. An additional resource, Herbal Medicines, is available in Scotland via Medicines Complete using an Athens Password.

Section A is intended for all HCPs and provides some useful background information on CAMs, including a table of common high risk CAMs. Section B is intended for use by Medicines Information staff.

Thanks to Sophie Davidson, Pharmacist, for her contribution.

Calcium and vitamin D – a bone of contention in osteoporosis prevention

The evidence to support **prescribing** calcium in community dwelling or the frail and elderly is fairly unsubstantial and should only be prescribed on the basis of a confirmed deficiency where calcium cannot be obtained from diet. Vitamin D prescribing is only beneficial in those who display risk factors of being deficient.

Osteoporosis is a disease characterised by low bone mass and the structural deterioration of bone tissue, which leads to an increased susceptibility to bone fragility and fractures[1]. The Scottish Intercollegiate Guidelines Network (SIGN) has recently updated its guidelines on osteoporosis, SIGN 142, which was first published in March 2015[2]. One of the many changes to the guidelines included a revised section on calcium and vitamin D supplementation. The updated guideline states that for prevention of fractures among community dwelling postmenopausal women and older men, calcium and vitamin D treatment either alone or in combination are not recommended. However to reduce the risk of non-vertebral fractures in frail older people who are at high risk of vitamin D deficiency, for example care home residents, it recommends to consider calcium and vitamin D treatment[2].

Nearly all studies investigating treatments for osteoporosis have included calcium and vitamin D as adjuncts, although it is uncertain if supplementation is essential if dietary intake is adequate. A recent article in the Drug and Therapeutics Bulletin (DTB) provided evidence to suggest calcium supplementation may cause small non-cumulative increases in bone density but fracture incidence remained unaffected[3].

References

1. NICE Osteoporosis Clinical guideline for prevention and treatment
2. SIGN 142 Management of osteoporosis and the prevention of fragility fractures
3. Osteoporosis: evidence for vitamin D and calcium in older people. Drug and Therapeutics Bulletin

The NHS Lothian Formulary Committee are yet to discuss the implications of these new guidelines on current practice in Lothian.

Summary of recommendations for calcium and vitamin D

Population	calcium		vitamin D	
	SIGN 142	DTB	SIGN 142	DTB
Healthy, community dwelling	Not recommended	Not recommended	Not recommended for prevention of fractures. General recommendation to consider supplementation for those with low sunlight exposure, for people whose clothing conceals them fully, dark skin	Recommended only in those with low sunlight exposure: seldom outdoors, living at high altitude, dark skin
Frail, community dwelling	May be considered if thought to be at high risk of vitamin D deficiency to reduce the risk of non-vertebral fractures	Not recommended	May be considered if thought to be at high risk of vitamin D deficiency to reduce the risk of non-vertebral fractures	Recommended
Institutionalised	May be considered if thought to be at high risk of vitamin D deficiency to reduce the risk of non-vertebral fractures	Not recommended	May be considered if thought to be at high risk of vitamin D deficiency to reduce the risk of non-vertebral fractures	Recommended
Osteoporotic, with or without fractures	Important to ensure patients taking antiresorptive therapy have sufficient calcium and vitamin D intake – assess diet and supplement as appropriate	Not an adequate treatment for osteoporosis Not required as co-therapy for bisphosphonates Used with anabolic drugs, and when denosumab is used with renal impairment	Important to ensure patients taking antiresorptive therapy have sufficient calcium and vitamin D intake – assess diet and supplement as appropriate	Not an adequate treatment for osteoporosis Important to rule out vitamin D deficiency before using potent antiresorptive drugs (eg. zoledronate, denosumab) Recommended in those with low sunlight exposure (see above) or living in institutions

Thanks to Mariam Naeem, Pharmacist, for her contribution.

Medicines governance needs you

The Formulary Committee (FC) is looking for new members who can bring expertise, enthusiasm and knowledge of clinical and cost effective use of medicines. The FC are looking for GPs, Nurses, Pharmacists and Secondary Care Clinicians to join the committee. Meetings are held every six weeks on Wednesday afternoons. The FC is responsible for approving new medicines for use in NHS Lothian and approving the content of the Lothian Joint Formulary. If interested, contact prescribing@nhslothian.scot.nhs.uk.