

Medicines Optimisation intervention brief

TITLE?
Review of hydroxocobalamin injections (vitamin B12) during the COVID-19 pandemic
WHAT?
<ul style="list-style-type: none"> Review of hydroxocobalamin injections in line with British Society for Haematology guidance with the aim of: <ol style="list-style-type: none"> Establishing if the original vitamin B12 deficiency was of a dietary or non-dietary cause Deprescribing if treatment is no longer indicated Continuing / delaying / temporarily suspending treatment Switching to oral cyanocobalamin if clinically appropriate Liver stores of vitamin B12 last for a year, therefore, delay or omission of the 3-monthly maintenance dose can occur for most patients without a detrimental effect. Where Vitamin B12 deficiency is non-dietary this decision should be made following an individual discussion with the patient. Continuation of either oral or injectable treatment will be needed for patients who are symptomatic (e.g. weakness, tiredness, light-headedness, heart palpitations, shortness of breath, pale skin, smooth tongue, constipation, diarrhoea, loss of appetite, flatulence, nerve problems like numbness or tingling, muscle weakness, and problems walking, vision loss).
WHY?
<ul style="list-style-type: none"> RCGP/ BMA joint statement on workload prioritisation during COVID-19 indicates vitamin B12 as an AMBER priority (i.e. continue if capacity allows). Administration of an IM injection often necessitates nurse administration either at home or in GP practices, requiring close contact between individuals and increasing the risk of spreading COVID-19. Possibility of a reduced number of available nursing staff due to either staff sickness or staff redeployment.
WHO?
<ul style="list-style-type: none"> All patients currently prescribed maintenance hydroxocobalamin injections who do not self-administer.
HOW?
<ul style="list-style-type: none"> Determine the indication for hydroxocobalamin using the searches provided. <ol style="list-style-type: none"> Where a clinical indication has not been recorded, consideration should be given to the need for continuing treatment. Discontinue injections if no longer indicated. Where deficiency is not diet-related (e.g. pernicious anaemia, total or partial gastrectomy, bariatric surgery, achlorhydria, pancreatic insufficiency, short bowel syndrome, bacterial overgrowth or inflammatory bowel disease) the need for intramuscular (IM) hydroxocobalamin should be discussed with each patient individually with the aim to have the shortest possible break from regular injections. Suggested options are:



- a) Continue to administer IM hydroxocobalamin:
 - i. At the GP practice if time / resources allow. Screen for COVID-19 symptoms and assess the patient's suitability to attend the practice.
 - ii. Explore alternatives such as administration at local pharmacies or home administration by district nurses. (It is not recommended to switch a patient to self-administration during the COVID-19 pandemic since instruction is likely to be difficult.)
- b) If the continued administration of IM hydroxocobalamin is not possible switch to oral cyanocobalamin, at a dose of **1000microgram (1mg)** per day, as a short-term option until regular IM hydroxocobalamin can be resumed i.e. once GP surgeries are able to do so safely.

ALL patients should be advised to monitor their symptoms and should contact their GP if they begin to experience neurological or neuropsychiatric symptoms such as pin and needles, numbness, problem with memory or concentration or irritability.

3. Where deficiency is diet-related.

- a) Suspend hydroxocobalamin injections
- b) Provide dietary advice about foods that are a good source of vitamin B12 to all patients: Vitamin B12 is naturally found in meat, chicken, fish and shellfish, dairy products, and eggs. Vitamin B12 is also found in many other foods which have had vitamin B12 added (fortified foods). For example, fortified breakfast cereals, fortified breads, fortified non-milk alternatives (soya, rice, oat, nut), and fortified yeast extract, such as Marmite.
- c) Recommend oral Vitamin B12 dietary supplements (cyanocobalamin) for patients on vegetarian and vegan diets. Oral cyanocobalamin should be taken between meals for maximum effect at a dose of 50 – 150microgram per day.
- d) Reassess serum B12 prior to recommencing IM hydroxocobalamin.

As per NHSE guidance, NHS prescribing for maintenance of vitamin B12 with oral preparations for people who are deficient due to dietary choices is not recommended.

TIPS

- **There are no licensed oral preparations of 1000microgram (1mg) vitamin B12.** This can only be obtained by using unlicensed nutritional supplements. If you do choose to prescribe an unlicensed supplement, you should inform the patient that it is unlicensed and document their consent. There are several BNF listed 1mg products. There is no fixed drug tariff price. We suggest using CyanocoB12 1mg tablets (50 tablets / pack) (TriOn Pharma) as we have confirmed stock availability through the major pharmacy wholesalers. This is not on the clinical systems and will have to be prescribed as a free text drug.
- **A licensed form of cyanocobalamin is available as 50microgram tablets.** If you choose to prescribe this please do so generically as there is a fixed Drug Tariff price. If patients are going to purchase their own supplement, then CyanocoB12 50microgram tablets (50 tablets / pack) (TriOn Pharma Ltd) and CyanocoMinn 50microgram tablets (50 tablets / pack) (Essential-Healthcare Ltd) are the lower cost BNF listed products.
- **Before switching a patient to oral cyanocobalamin please check availability with the community pharmacy.**
- Oral cyanocobalamin should be taken between meals for maximum effect.

SO WHAT?

- Reduced face-to-face patient contact which can lower the risk of spreading COVID-19.
- Fewer nursing staff required during a time of high demand and potentially high staff sickness.

FURTHER INFORMATION



1. RCGP/BMA Primary Care Workload Prioritisation Document – April 2020.
<https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-policy/2020/covid19/RCGP-guidance/202003233RCGPGuidanceprioritisationroutineworkduringCovidFINAL.ashx>
2. British Society for Haematology guidance on B12 supplements during COVID pandemic
<https://b-s-h.org.uk/about-us/news/covid-19-updates/>
3. Conditions for which over the counter items should not routinely be prescribed in primary care: Guidance for CCGs <https://www.england.nhs.uk/wp-content/uploads/2018/03/otc-guidance-for-ccgs.pdf>

