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Vitamin B12 Treatment and Review

During and After COVID-19 Pandemic

To reduce interaction with healthcare staff during the COVID-19 pandemic the British Society of Haematology (BSH) has issued guidance for patients on vitamin B12. This will mean that some patients will stop their B12 injections either temporarily or permanently.

Non-dietary vitamin B12 deficiency (e.g. pernicious anaemia, prior gastrectomy, bariatric surgery, achlorhydria, pancreatic insufficiency, short bowel syndrome, bacterial overgrowth, inflammatory bowel disease)

NICE 2019 recommendation: administer hydroxocobalamin 1mg intramuscularly every 2-3 months for life.

BSH advice during the COVID-19 pandemic for patients established on IM hydroxocobalamin:

The need for IM hydroxocobalamin should be discussed with each patient individually. We recommend that screening questions for COVID-19 infection are asked before patients attend their GP surgeries. Alternatives to attending the GP surgery such as local pharmacies or home administration by district nurses should be explored.

As an alternative, oral cyanocobalamin can be offered at a dose of 1mg per day until regular IM hydroxocobalamin can be resumed, i.e. once GP surgeries are able to do so safely, aiming to have a shortest possible break from regular injections. 1mg oral tablets are an unlicensed special and should only be recommended short-term for patients with known non-dietary vitamin B12 deficiency while unable to receive IM injections. These are available for purchase in pharmacies and health-food stores.

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

Patients who are already self-administering IM hydroxocobalamin should continue to do so but we do not recommend a patient switching to self-administration during the COVID-19 pandemic since instruction is likely to be difficult.

Dietary vitamin B12 deficiency

Patients should be given dietary advice about foods that are a good source of vitamin B12 for example eggs, meat, milk and other dairy products, yeast extract (including Marmite), salmon and cod or foods which have been fortified with B12 (some soy products, breakfast cereals and breads). Where improvement to diet is not enough or not possible (e.g. vegan) OTC oral cyanocobalamin 50-150microgram daily can be recommended to purchase. Consider referral to dietician if diet is poor.

Patient support

Treatment-Vitamin B12 or folate deficiency anaemia (www.nhs.uk/conditions/vitamin-b12-or-folate-deficiency-anaemia/treatment/)

Vitamin B12 deficiency anaemia—information and resources on the Patient UK website ([www.patient.co.uk/health/Anaemia-\(Pernicious\)-and-Vitamin-B12-Deficiency.htm](http://www.patient.co.uk/health/Anaemia-(Pernicious)-and-Vitamin-B12-Deficiency.htm))

VITAMIN B12 TREATMENT AND REVIEW

NICE 2019 recommendation: advise people either to take oral cyanocobalamin tablets 50-150micrograms daily between meals or have a twice-yearly hydroxocobalamin 1mg injection. In vegans, treatment may need to be life-long, whereas in other people with dietary deficiency replacement treatment can be stopped once the vitamin B12 levels have been corrected and the diet has improved.

BSH advice during the COVID-19 pandemic for patients established on IM hydroxocobalamin:

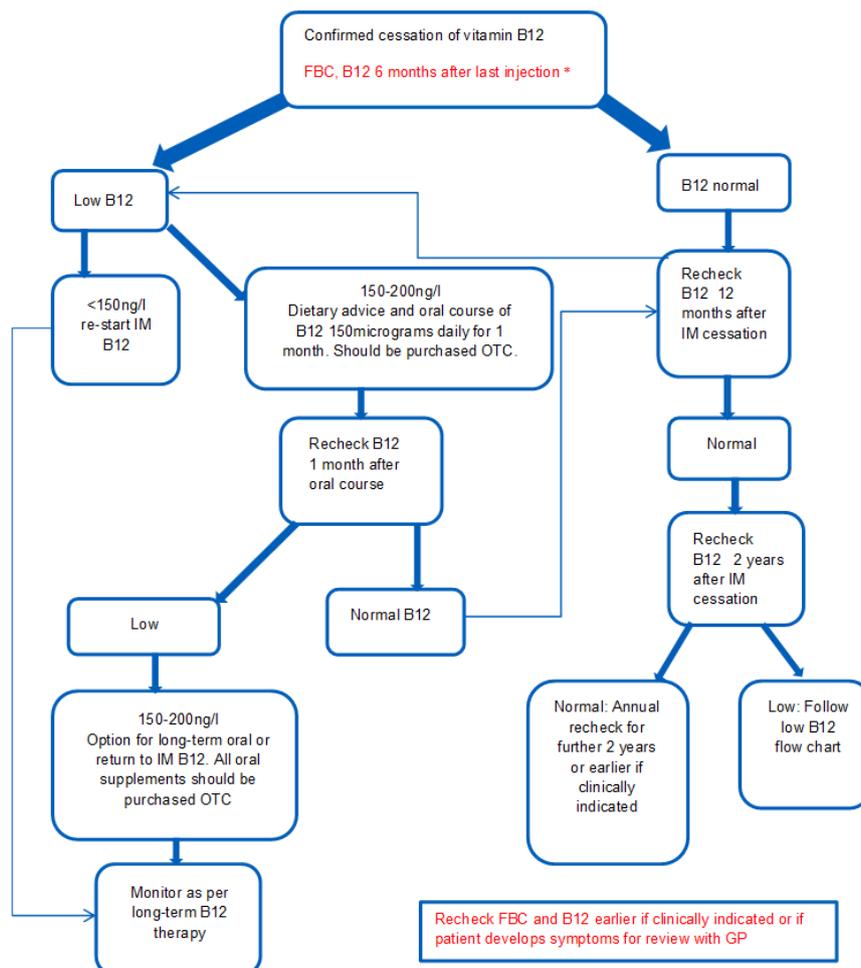
An alternative is to recommend cyanocobalamin tablets, 50-150micrograms, daily between meals. We recommend reassessing serum B12 prior to recommencing IM hydroxocobalamin. However, many of these patients may be vitamin B12 replete with adequate levels within the liver, and therefore may be able to safely stop taking vitamin B12 supplements possibly for up to a year (Hoffbrand 2016).

Dietary advice should be given to all patients. Patients on vegetarian and especially vegan diets should continue taking oral supplements which may be purchased in pharmacies and health-food stores.

Advice for Review of Vitamin B12 following COVID-19 Pandemic

It is known that some patients on IM hydroxocobalamin were commenced on treatment with borderline low B12. Due to variability of the assay, and changes to health/diet over time, patients should have their vitamin B12 reviewed as per other medication.

Stopping IM hydroxocobalamin should be discussed with patients, reasons explained and schedule of follow-up blood tests advised. When patients attend for their blood test, check to see if they have been taking any OTC vitamin B12 supplements.



Items which should not routinely be prescribed in primary care – ‘Self Care Policy’

Vitamins are included in the policy as items of limited clinical effectiveness which are of high cost to the NHS. Most vitamins can be purchased over-the-counter (OTC) and should not be prescribed unless exceptional circumstances.

Exclusion criteria – those in whom IM vitamin B12 should be restarted (if B12 therapy suspended due to self-isolation for example)

The following patients should remain on IM vitamin B12 – records should be reviewed thoroughly for indication of B12 supplementation.

- Confirmed Pernicious Anaemia (this may be historical) – e.g. patient had a shillings test or unsuccessful vitamin B12 cessation in the past
- Intrinsic factor antibody positive patients
- Patients with gastric health problems (e.g. gastric bypass, ileal disease, malabsorption, prior gastrectomy, achlorhydria, pancreatic insufficiency, short bowel syndrome, bacterial overgrowth, inflammatory bowel disease)
- Patient in whom GP deems IM vitamin B12 necessary
- Patients with neurological compromise at vitamin B12 diagnosis

Patients suitable for treatment cessation

Stopping IM vitamin B12 should be discussed with the patient, reasons explained and the schedule of follow-up blood tests followed as per flow-chart. If the patient currently has their IM vitamin B12 administered by District Nurses then they should be informed. Dietary advice should be provided and information on how to identify signs of deficiency.

<https://www.nhs.uk/conditions/vitamin-b12-or-folate-deficiency-anaemia/>

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