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Iron deficiency

This is a well recognised cause of microcytic, hypochromic anaemia. It can also be associated with a thrombocytosis.

Iron deficiency is present if the ferritin is low, however a normal ferritin does not exclude iron deficiency, particularly in the context of inflammation or a raised CRP. Iron studies are notoriously unreliable and dependent on recent iron intake, but may be helpful if the ferritin is uninformative. A low serum iron with a high transferrin level and low transferrin saturation is consistent with iron deficiency. Isolated low serum iron is not sufficient for diagnosis and is more likely due to inflammation.

When iron deficiency is identified, investigation of the cause is required. This may be dietary, malabsorption or bleeding and appropriate clinical review in the community should direct investigation. When identified, any potential causes of iron deficiency should be addressed where possible.

Oral iron replacement is now recommended to be given as 1 tablet alternate days, as this gives optimal iron absorption and reduces side effects. Please ensure patients are counselled regarding the common side effects. Ideally tablets should be taken with a source of vitamin C (eg orange juice); inhibitors of iron absorption (such as tea and chapati flour) should be avoided at the time of dosing.

If first line oral iron replacement is not tolerated, then an alternative oral preparation should be tried. In the event that this is also not tolerated, or is ineffective, an iron infusion may be beneficial. Patients should be made aware of the small risk of severe allergic reaction with iron infusions.

If an iron infusion is required, please refer to the speciality associated with the cause of the iron deficiency. Only in the event of full investigation not revealing a cause of iron deficiency and the patient not being under regular review with a hospital team who could facilitate iron infusion, should the haematology team be approached to consider arranging parenteral iron.

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