

Investigation of a raised ferritin

Introduction

Raised serum ferritin levels can be due to multiple different aetiologies, including iron overload, inflammation, liver or renal disease, malignancy and metabolic syndrome. The following algorithm is a suggested approach to the investigation of isolated elevated serum ferritin levels in patients without known secondary iron overload (modified from Cullis et al).

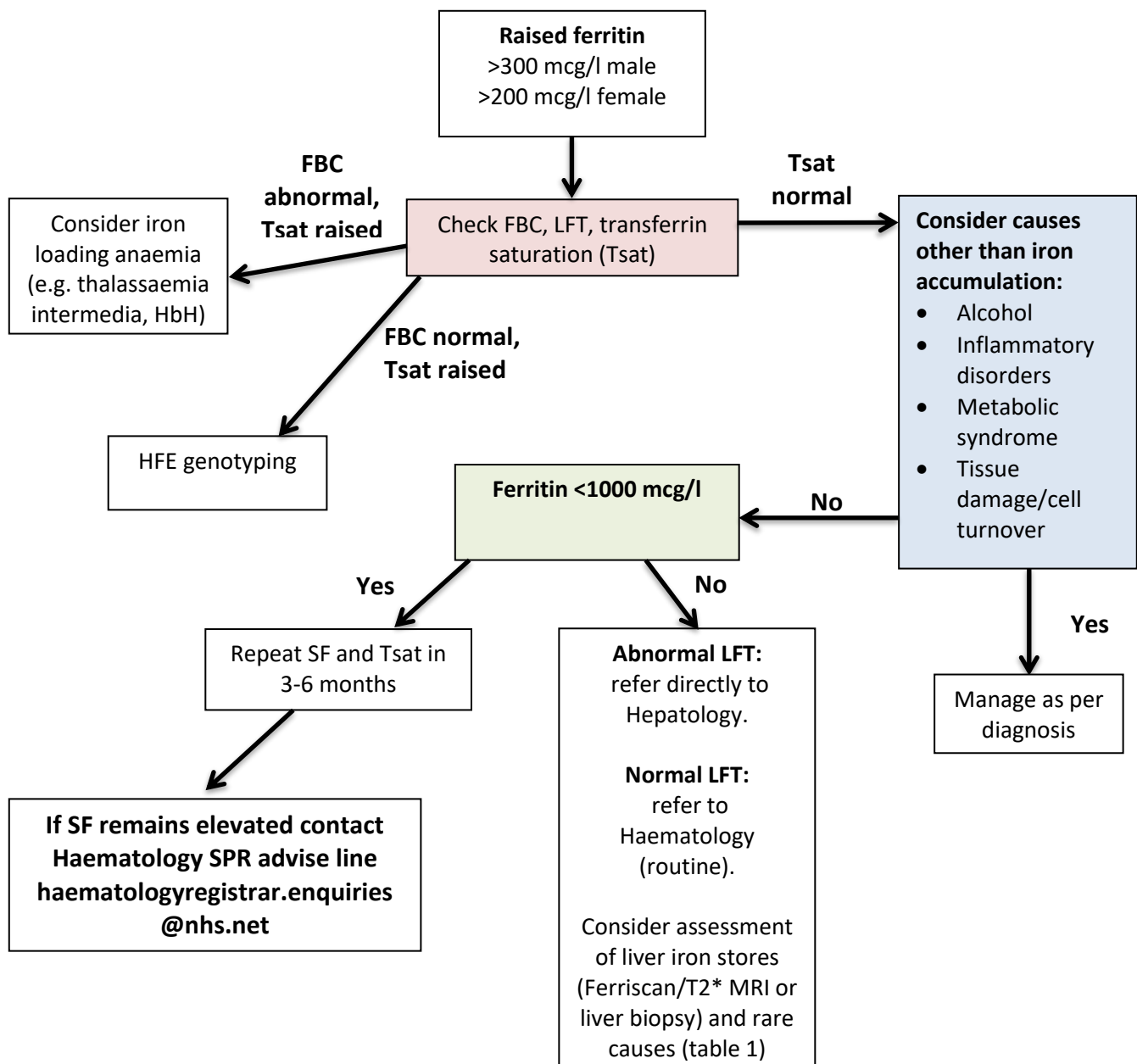


Table 1: Causes of a raised ferritin

Increased ferritin synthesis due to iron accumulation	Increase in ferritin synthesis not associated with significant iron accumulation	Increased ferritin as a result of cellular damage
Hereditary (genetic) haemochromatosis Hereditary acaeruloplasminaemia Secondary iron overload from blood transfusion or excessive iron intake/administration Ineffective erythropoiesis: sideroblastic anaemia, some myelodysplastic syndromes(e.g. refractory anaemia with ring sideroblasts) Thalassaemia Atransferrinaemia Ferroportin disease	Malignancies Malignant or reactive histiocytosis Hereditary hyperferritinaemia with and without cataracts Gaucher disease Acute and chronic infections Chronic inflammatory disorders Autoimmune disorders	Liver diseases including: liver necrosis, chronic viral hepatitis, alcoholic and non-alcoholic steatohepatitis * Chronic excess alcohol consumption

*may also have iron overload

Documents:

[S59, Haemochromatosis management pathway](#)

References:

1. Cullis JO, Fitzsimons EJ, Griffiths WJ, Tsochatzis E, Thomas DW; British Society for Haematology. Investigation and management of a raised serum ferritin. Br J Haematol. 2018;181(3):331-340

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Review

Name	Revision	Date	Version	Review date
Dr Henna Wong	New document	February 2020	1.0	February 2022
Dr Wale Atoyebi	Full Review	April 2024	2.0	April 2026