Service: SHYPS/Biochemistry/York&Scarborough Filename: CB/UI/YS-3 Version: 1 Date of issue: November 2024 Authors: Alison Jones and Rob Driver Owner: Alison Jones



Scarborough, Hull and York Pathology Service

## **Investigation of Raised Ferritin in Primary Care**

Ferritin reference intervals: Male: 30 – 400ug/L Female: 30 – 150ug/L (under 60y); 30 – 260ug/L (over 60y)

Ferritin levels increase throughout life with significant increases post-menopause in female patients.

## 1. Initial clinical assessment

<ul> <li>Red flags - ?Malignancy / Ferritin persistently &gt;1000ug/L</li> </ul>	Refer without delay	
<ul> <li>Assessment of alcohol consumption</li> </ul>	AUDIT-C assessment	
<ul> <li>Assessment of risk factors for liver disease</li> </ul>	<ul> <li>Viral hepatitis, metabolic syndrome, DM</li> </ul>	
<ul> <li>Clinical examination for signs of <u>chronic liver disease</u> and <u>iron overload</u></li> </ul>		
Acute illness	Check CRP. Repeat in 6 weeks if unwell	
<ul> <li>History of repeated blood transfusions / iron therapy</li> </ul>	Check: FBC, CRP, U&E, LFTs, HbA1c,	
• Family history of iron overload, liver disease, liver cancer	Lipids, TFTs, as appropriate.	



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## Investigation of Raised Ferritin without iron overload

Males	Post-menopausal women	Pre-menopausal women
Ferritin >400ug/L	Ferritin >260ug/L	Ferritin >150 ug/L
TSAT <50%	TSAT <45%	TSAT <45%

- Correlate with clinical history and, where necessary, repeat history and examination
- Consider undiagnosed serious conditions (listed below by most to least common):

Chronic alcohol consumption	Suggestive lab markers: raised GGT, MCV, poor nutritional status
Metabolic syndrome	Waist circumference, dyslipidaemia, HbA1c, blood pressure
Steatotic / fatty liver	Calculate Fib-4 (requires AST, ALT, platelets), then refer to local guidance
Acute inflammation	Acute infections including viral hepatitis
Chronic inflammation	Chronic infection, autoimmune disease
Malignancy	Investigate as appropriate, consider referral to Rapid Diagnostic Centre
Haematological disorders	FBC and film. Refer to local <u>Haematology</u> guidance

## Harmful alcohol use?

- Calculate Fib-4 and follow referral pathway for Direct Access Fibroscan.
- Risk factors for metabolic dysfunction associated steatotic liver disease (MASLD) (fatty liver)?
  - Refer to local guidelines for investigation and management of <u>suspected liver disease</u>, even if LFTs are normal.
- Cause not found?
  - Advice & Guidance to Hepatology or Haematology, as appropriate.