**Algorithm for the investigation of raised Ferritin**

Raised Ferritin

**Possible Causes**

* Acute phase response (inflammation, infection, malignancy)
* Alcohol
* Hepatic dysfunction/disease
* True Iron Overload (Hereditary Haemochromatosis, ineffective erythropoiesis, multiple transfusion, iatrogenic)

**Tests**

* Exclude alcohol as a cause (if suspected then 6 months abstinence required and then retest)
* History/examination/investigations to exclude infection/inflammatory conditions/malignancy (to include CRP)
* Consider non-invasive liver screen: bloods/liver USS/consider testing serum lipids
* ? Family history of Hereditary Haemochromatosis
* Fasting Transferrin saturation

Fasting Transferrin saturation (TS)

>50% in premenopausal women or

>55% in postmenopausal women and men suggests iron overload

Refer non-urgently to Haematology for investigation for Hereditary Haemochromatosis.

If Haemochromatosis is thought to be likely (raised fasting TS and/or family history positive) and patient consents, then Haemochromatosis gene mutation studies (5 ml EDTA sample) can be sent from General Practice to the Haematology laboratory at HDFT so that the result will be available at the first clinic appointment

Fasting Transferrin Saturation (TS) <50% in premenopausal women

<55% in postmenopausal women and men

Iron overload unlikely but if results do not fit with clinical picture consider repeat in 4-6 weeks. TS cannot absolutely reliably exclude Hereditary Haemochromatosis

Ferritin <700

No clinical explanation for a raised ferritin <700 (fasting TS <50-55%), either monitor 3-6 monthly in General Practice and refer if ferritin shows a sustained rise or refer non-urgently to Haematology (or Gastroenterology if liver disease still suspected)

Ferritin >700

No clinical explanation for a raised ferritin >700 (fasting TS <50-55%), refer non-urgently to Haematology if Haemochromatosis still suspected or Gastroenterology if liver disease more likely

Ferritin >700

No clinical explanation for a raised ferritin >700, refer non-urgently to Haematology if Haemochromatosis still suspected or Gastroenterology if liver disease more likely