Transferrin Saturation

UKAS MEDICAL 7880 Accredited to ISO 15189:2012

Synonyms	
Clinical Indication	Transferrin saturation is used as a screening test for haemochromatosis, a common (1 in 200-300 individuals), autosomal recessive disorder of iron absorption, with progressively increasing iron stores and organ damage. Not all patients with the genetic abnormality may be symptomatic, but they remain at risk. Raised levels should be confirmed by genotyping for HFE mutations. Transferrin saturation may also be helpful in screening patients with low MCV (less than 80) and raised CRP (acute phase reaction) for iron deficiency anaemia.
Part of Profile / See Also	
Request Form	Combined Pathology manual Blood form or ICE request
Availability / Frequency of Analysis	On request.
Turnaround Time	Same day
Patient Preparation	None required.
Sample Requirements	
Specimen Type	Serum
Volume	0.5 mL
Container	 Yellow top (SST) tube Or  Paediatric green (lithium-heparin) tube Or  Paediatric orange (lithium heparin) tube
Reference Range & Units	**TRANSFERRIN SATURATION** **Sex** / **Range (%)** Female: 15 – 45 Male: 15 – 50 BSCH Guidelines Genetic Haemochromatosis 2000/EASL Clinical Practice Guidelines for HFE Haemochromatosis.J Hepatol (2010) Transferrin saturation of less than 15% reflects iron deficiency and saturation greater than 60% suggests iron overload.
Interferences	

Interpretation & Clinical Decision Value (if applicable)	A persistent transferrin saturation >50% in the absence of other potential causes of iron overload is suggestive of hereditary haemochromatosis. Transferrin saturation results are reviewed in clinical authorisation and HFE genotyping may be added by the duty Biochemist if appropriate
References	Sherwood RA, Pippard MJ, Peters TJ. Iron homeostasis and the assessment of iron status. Ann Clin Biochem 1998; 35: 693-708
Test code	
Lab Handling	Analysed from primary tube and stored at 4°C