

Hemochromatosis

This page was last modified on 23-07-2018



Contents

- [Condition](#)
- [Guidance at RECRUITMENT](#)
- [Guidance at CT /WORK-UP](#)
- [Justification for guidance](#)
- [References](#)

Condition

Hereditary haemochromatosis is an autosomal recessive disorder most frequently associated with mutations of the HFE gene. The estimated incidence of the C282Y mutation is 10% in people of northern European descent. In that population, about 1% have the condition. Secondary iron overload may be the result of repeated blood transfusion. Persistent iron overload may eventually lead to organ damage especially of the heart, liver and endocrine organs. HFE genes are not expressed in hematopoietic stem cells.

Guidance at RECRUITMENT

Accept, if no end-organ failure

Guidance at CT

Accept, if no end-organ failure

Guidance at CT/WORK-UP

Accept, if no end-organ failure

Individual at Risk

Because the associated genes are not expressed in the hematopoietic pool there is no risk of transmitting the disease to the recipient. Iron overload in itself does not impose risk for the donor or the recipient. The donor is only at risk if there is organ damage which increases the risk of complications of the stem cell donation. In case of secondary iron overload the underlying condition must be evaluated.

Justification for guidance

The donor is only at risk if there is organ damage, which increases the risk of complications of the stem cell donation. Iron overload in itself does not impose risk for the donor or the recipient.

References

Donor suitability working group WMDA meeting Munich 2018.

Andrews, Nancy C. (1999). "Disorders of Iron Metabolism". *New England Journal of Medicine*. 341 (26): 1986–95. doi:10.1056/NEJM199912233412607. PMID 10607817.

Pietrangelo, A (2003). "Haemochromatosis". *Gut*. 52 (90002): ii23–30. doi:10.1136/gut.52.suppl_2.ii23. PMC 1867747 Freely accessible. PMID 12651879.

Franchini, Massimo (2006). "Hereditary iron overload: Update on pathophysiology, diagnosis, and treatment". *American Journal of Hematology*. 81 (3): 202–9. doi:10.1002/ajh.20493. PMID 16493621.