

Non-Transfusion-Dependent Thalassemia (NTDT) Chelation Guidelines

Goals of Chelation

1. Maintain LIC in the desired range of 3-7 mg/g DW.
2. Prevent iron deposition in organs other than the liver (rare in NTDT).
3. Measure LIC by MRI, same as above.
4. Prevent chelator toxicity through close monitoring.

Beginning Chelation

- Chelation is usually started based on the LIC measured by MRI. Levels above the range of 3-7 mg/g DW necessitate chelation.
- Patients are usually started on single agent chelation, with deferasirox administered once daily. The starting dose is lower than TDT, usually 5-10 mg/kg/d of Exjade, or 4-7 mg/kg/d of Jadenu®.
- Chelation is often periodic, based on LIC values. Patients frequently receive treatment for a year or two and may discontinue treatment for a period before another MRI shows increased iron again.

Monitoring Chelation Efficacy

- Efficacy is monitored through an annual MRI of the liver. Because NTDT patients load the heart less frequently, only one MRI is necessary to confirm this. If the T2* is normal, further monitoring may be performed less frequently – every three to five years, if the LIC remains in a stable and low range.
- Ferritin values show a poor correlation with LIC, but trends may be followed.