

Name:
 Hospital ID No:
 Clinical comments: Thalassemia iron overload assessment

EXAMINATION: MRI T2* study

DATE OF EXAMINATION:

SEQUENCES:

Haste - axial, coronal and sagittal.

Multi-echo Gradient Echo T2* - heart and liver.

FINDINGS:

1. Myocardium T2*:

Sequences	T2* value (ms)	Myocardial iron concentration (MIC) mg/g
Dark blood		
Bright blood		
Degree of myocardial iron overload		<i>(normal/mild/moderate/severe)</i>

2. Liver T2*:

Liver T2* value (ms)	
Liver iron concentration (LIC) mg/g	
Degree of liver iron load	<i>(normal/mild/moderate/severe)</i>

3. Other findings:

(extramedullary haematopoiesis – absent/present, spleen – splenomegaly/post splenectomy)

CONCLUSION:

REFERENCE:

Table 1: The severity of myocardial iron load based on the cardiac T2* values and timing for repeat MRI are presented in the following table.^{MoH, 2024}

Degree of myocardial iron load	T2* value(ms)	Timing to repeat MRI
Normal	>20 ms	2 yearly
Mild	16-20 ms	Annually
Moderate	10-15 ms	Annually
Severe	<10 ms	6 monthly

Table 2: The severity of liver iron load based on T2* and LIC . MoH, 2024

Degree of liver iron load	T2* value(ms)	Liver iron concentration - LIC (mg/g)
Normal	>11.4 ms	<2
Mild	3.8-11.4 ms	2-7
Moderate	1.8-3.8 ms	7-15
Severe	<1.8 ms	>15