

# Long term outcomes of patients treated for Idiopathic Relapsing Transverse Myelitis

Viviana I. Orozco-Leon, MD; S. Richard Dunham, MD; and George J. Hutton, MD

Department of Neurology, Baylor College of Medicine, Houston, Texas

## BACKGROUND

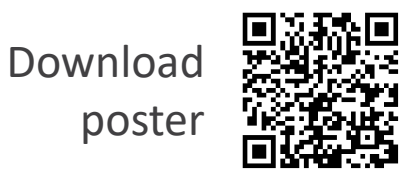
- The incidence of idiopathic transverse myelitis (ITM) has been reported as 1.3 to 4.6 per million per year in the United States. Around 9 - 31% of ITM cases are relapsing.
- Our group has previously described the use of long term immuno-suppression to prevent relapses in IRTM patients.
- We studied the long term use of azathioprine versus mycophenolate mofetil to prevent relapses in IRTM.

## OBJECTIVE

- To explore the long term outcomes of patients on azathioprine versus mycophenolate mofetil as treatment for Idiopathic Relapsing Transverse Myelitis (IRTM).

## METHODS

- A retrospective chart review of 37 adult patients with history of transverse myelitis between January 2014 - July 2017 followed at Maxine Mesinger Multiple Sclerosis Clinic was completed.
- Eight (n=8) subjects presented with two or more episodes of ITM, fulfilling the 2002 diagnostic criteria.
- We excluded patients with multiple sclerosis, neuromyelitis optica spectrum disorder, collagen vascular diseases, infectious etiologies, among others.
- Baseline patient demographics and associated comorbidities were obtained. Expanded Disability Status Scale (EDSS) scores were compared before and after initiation of immunosuppression.



## RESULTS

Table 1: Subject Characteristics

Variable	(n=8) Mean ± SD
Age, years	48 ± 16
Age at diagnosis, years	36 ± 13
Female (%)	63
Initiated on azathioprine (%)	75
Pre Expanded Disability Status Scale (EDSS)	3.8 ± 1.0
Post Expanded Disability Status Scale (EDSS)	4.0 ± 2.1

Figure 1: Expanded Disability Status Scale (EDSS)

Data from Kurtzke JF. *Neurology*. 1983;33:1444-1452.

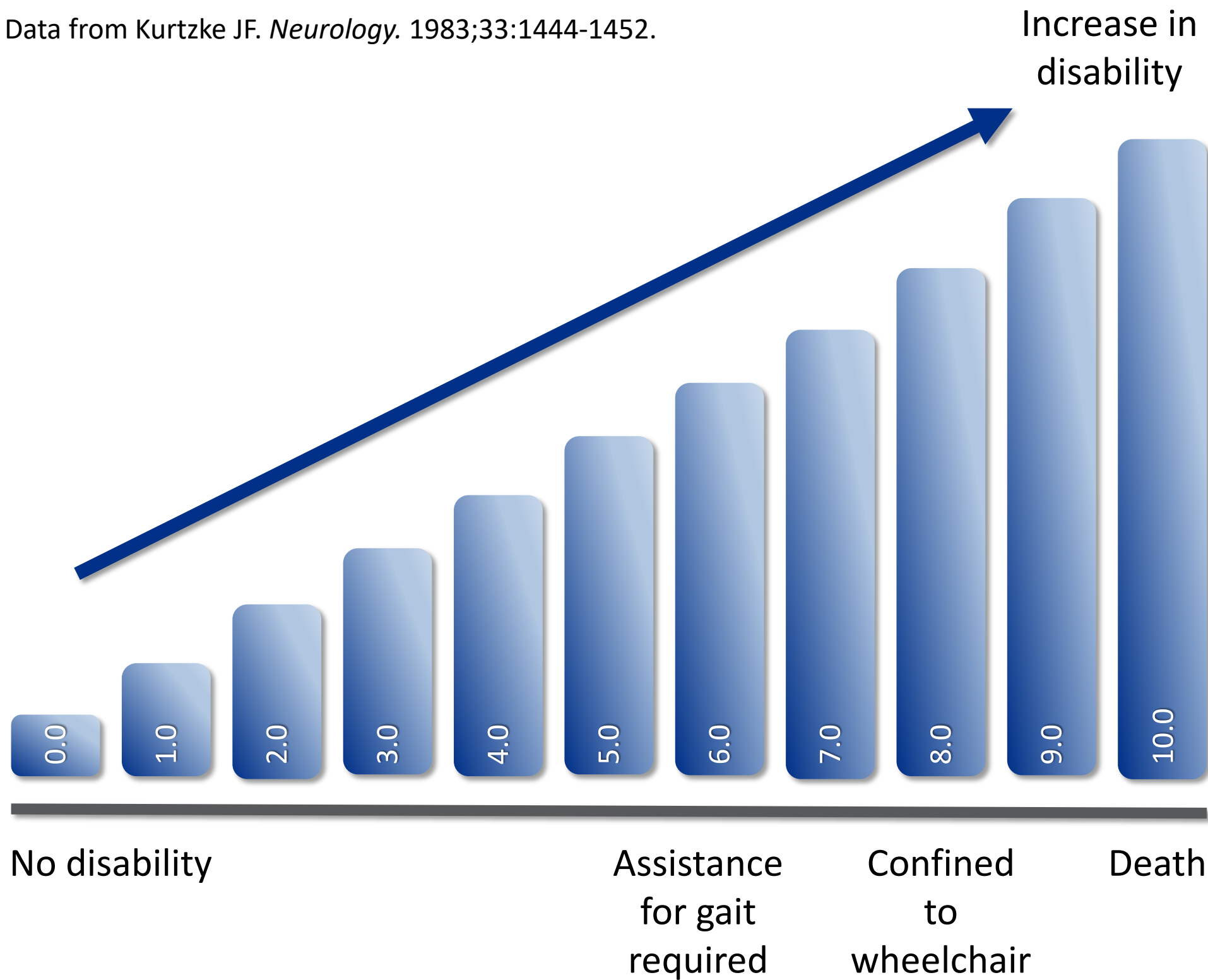


Table 2: Subject Description

Subject	Current Treatment	EDSS PRE	EDSS POST	Change
1	MMF	3.5	2.5	1.0
2	azathioprine	2.0	2.0	0.0
3	MMF	5.0	5.5	-0.5
4	azathioprine	4.5	4.5	0.0
5	MMF	3.5	2.0	1.5
6	None	4.5	7.5	-3.0
7	azathioprine	4.0	6.0	-2.0
8	None	3.5	2.0	1.5

MMF = mycophenolate mofetil

- Three subjects discontinued azathioprine due to side effects.
- Most common side effect on patients using azathioprine was elevation of liver enzymes (50%).
- EDSS scores before and after treatment initiation showed no significant difference among treatment groups (p=0.55).

## CONCLUSIONS

- Our data explored the baseline characteristics and outcomes of IRTM patients on immunosuppression.
- Although no significant differences on EDSS score were seen between azathioprine and mycophenolate mofetil, azathioprine-associated transaminitis was evident.
- Future prospective randomized clinical trials are needed to explore the long term outcomes of immunosuppression in patients with IRTM.