Advanced brain white matter assessment of trigeminal neuralgia secondary to multiple sclerosis using myelin mapping

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Results

MS-TN Cohort Demographics

Age (years, mean ± SD)	55 ± 10
Sex (M : F)	20 : 28
Duration of MS (years, mean ± SD)	15 ± 9
Duration of TN pain (years, mean ± SD)	5 ± 3
Surgical response rate (responder : non-responder)	32 : 16

Healthy controls were age and sex matched.

Myelin Map External Validity

Two-one-sided t-tests (TOST) demonstrated equivalence between MMs of local and external HCs (all regions $p<0.05$), confirming cross-scanner generalizability.

TOST:
Determines whether the means of two populations are equivalent based on two independent samples from these populations.

Myelin Map Internal Validity

MM differences between MS-TN patients and healthy controls ($p<0.0001$) in the 29/48 JHU regions, predominantly demonstrating demyelination in MS-TN.