FOCUSED ULTRASOUND FOR UNCOMMON CAUSES OF TREMOR

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Background: MRI-guided focused ultrasound (FUS) has established efficacy in tremor relief.

Objective: To report on the efficacy and safety of FUS VIM-thalamotomy in 13 patients with uncommon causes of tremor including: possible multiple system atrophy-Parkinsonian type (MSA-P) (5), dementia with Lewy bodies (DLBD) (4), probable paraneoplastic syndrome (PNS) (2), chronic inflammatory demyelinating polyneuropathy (CIDP) (1) and fragile X-associated tremor/ataxia syndrome (FAXTAS) (1).

Methods; Tremor was assessed in the treated hemibody using the Clinical Rating Scale for Tremor (hemi-CRST).

Results: In MSA-P, DLBD and FAXTAS hemi-CRST scores improved with persistent tremor relief at 1 year. In patients with PNS and CIDP tremor relief was not sustained. Adverse events were transient and resolved within a year.

Conclusions: Our report suggests that FUS VIM-thalamotomy may be effective in patients with MSA-P, DLBD and FAXTAS and less so in patients with PNS and CIDP. Larger double blind studies are needed to verify our observations.