

Thalamotomy

- MRI-guided Focused Ultrasound VIM Thalamotomy with Indwelling GPI DBS Electrodes: A Case Report
 - Successful Unilateral Ventro-Oral (Vo) Thalamotomy for Peripheral Post-traumatic Dystonia With Complex Regional Pain Syndrome: A Case Report
 - Enhancing precision in MRgFUS for tremor treatment: a systematic review of tractography-based VIM targeting approaches
 - Focused Ultrasound Thalamotomy for Essential Tremor in Patients on Anticoagulation: Case Report in a Patient with Factor V Leiden Mutation and Review of the Literature
 - Radiosurgery to the Medial Thalamus for Chronic Pain: A Single Group Experience and Review of Literature
 - A retraced spiral strategy with semi-automatic deblurring for volumetric thermometry
 - Post-thalamotomy Changes Mimicking Cavernous Malformations on MRI: A Case Report of a Historical Surgical Treatment
 - Quantitative and qualitative tremor evaluation after MR-guided focused ultrasound thalamotomy
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Feature	Thalamotomy	Subthalamotomy
Target structure	Thalamus (mainly VIM nucleus)	Subthalamic nucleus (STN)
Main use	Tremor control	Tremor, bradykinesia , rigidity control
Common in	Tremor-dominant Parkinson's, essential tremor	Parkinson's disease (all motor symptoms)
Typical side effects	Sensory deficits, dysarthria	Hemiballismus (involuntary flinging movements), speech or mood changes
Anatomical position	Above the subthalamus	Below the thalamus

see [Medial thalamotomy](#)

Medial thalamotomy and thalamotomy are related but not the same.

Here's the key difference:

"Thalamotomy" is a general term. It simply means making a lesion in the **thalamus** to treat a neurological disorder (like tremor, pain, dystonia, etc.). The thalamus is large and has many different nuclei, so thalamotomy could target different parts depending on the disease and symptoms.

"Medial thalamotomy" is a specific type of thalamotomy. It refers to lesioning more medial nuclei of the thalamus, often targeting areas involved in chronic pain (like the centromedian-parafascicular complex, intralaminar nuclei, etc.). It's less common for treating Parkinsonian tremor, where usually a ventrolateral thalamotomy (especially **VIM** — ventral intermediate nucleus) is preferred.

In short:

Every medial thalamotomy is a thalamotomy,

But not every thalamotomy is a medial thalamotomy.

When treating [Tremor-predominant Parkinson's disease](#), VIM thalamotomy (lateral part) is the standard, not medial thalamotomy.

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