

Ventralis intermedius nucleus (VIM)

Nucleus of the [thalamus](#).

Thalamic ventralis intermedius [deep brain stimulation](#) (VIM-DBS) is generally effective in treating refractory tremor in [Parkinson's disease](#) (PD) and in [essential tremor](#) (ET), but some patients do not respond well due to side effects or from loss of the effect of stimulation over time.

Gamma Knife [thalamotomy](#) GKT with a maximal dose of 130 Gy to the VIM is a safe procedure that can replace other surgical procedures ¹⁾.

Case reports

2016

A patient in whom 8.8 years following the implantation of a bilateral [deep brain stimulation](#) (DBS) into the Vim, a [high grade glioma](#) was diagnosed in close proximity to the two [electrode](#) leads. A possible relationship between the permanent DBS and the development of the brain tumour is discussed ²⁾.

¹⁾

Cho KR, Kim HR, Im YS, Youn J, Cho JW, Lee JI. Outcome of gamma knife thalamotomy in patients with an intractable tremor. J Korean Neurosurg Soc. 2015 Mar;57(3):192-6. doi: 10.3340/jkns.2015.57.3.192. Epub 2015 Mar 20. PubMed PMID: 25810859; PubMed Central PMCID: PMC4373048.

²⁾

Mindermann T, Mendelowitsch A. Deep brain stimulation and development of a high-grade glioma: incidental or causal association? Acta Neurochir (Wien). 2016 May;158(5):915-7. doi: 10.1007/s00701-016-2773-9. Epub 2016 Mar 18. PubMed PMID: 26993141.

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Last update: **2024/06/07 02:59**

