Gamma Knife thalamotomy GKT

A systematic review was conducted by searching MEDLINE (OvidSP 1946-January Week 1 2014) and Embase(OvidSP 1974-2014 January). The search strategy was not limited by study design or language of publication. All searches were conducted on January 7, 2014. Treatment efficacy, adverse outcomes, and patient deaths were reviewed and tabulated. Complications appeared months to years post procedure and most commonly consisted of mild contralateral numbness and transient hemiparesis. Rarely, more severe complications were reported, including dysphagia and death. Though no data from randomized controlled trials are available, the analysis of the literature indicates that unilateral gamma knife thalamotomy using doses from 130 to 150Gy appears safe and well tolerated [1)].

Gamma Knife thalamotomy GKT with a maximal dose of 130 Gy to the VIM is a safe procedure that can replace other surgical procedures [2)].

1)
Campbell AM, Glover J, Chiang VL, Gerrard J, Yu JB. Gamma knife stereotactic radiosurgical thalamotomy for intractable tremor: A systematic review of the literature. Radiother Oncol. 2015 Feb 14. pii: S0167-8140(15)00073-0. doi: 10.1016/j.radonc.2015.01.013. [Epub ahead of print] Review. PubMed PMID: 25690750.

2)
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.