Anesthesia for Brain Lesioning in Tremor and Dystonia, an Experience in Annapurna Neurological Institute, Kathmandu, Nepal

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Abstract:

Background: Movement disorders Tremors and dystonia are first and third most prevalent movement disorders seen and about 50% of patients with dystonia also have tremors too. The prevalence of movement disorders is roughly equal between sexes. Movement disorders are caused by Basal ganglia disease. Lesioning of brain and DBS are established treatment for tremor and dystonia. Targeting mechanism for these procedures demands continuous support of the patient in conscious condition during surgical manipulations. The role of Anesthesiologist in such surgeries is to provide monitored anesthesia care and to maintain the vital parameters only. In some cases, we provide mild sedation too if required.

Method: This is a retrospective study of patients with movement disorders operated in Annapurna Neurological Institute, Kathmandu for one year (Jan 2025- Dec 2025). A total 37 patient operated during this period. Among them 24 males and 13 females. During surgery 3 patients mildly sedated with inj midazolam and rest of all were operated under local anesthesia only.

Results: Movement disorders are belonged to the psychosocial problem of the society. Surgery significantly improves the quality of life. In our center lesioning and DBS placement both shows similar postoperative results, whereas DBS is several times expensive than lesioning. Among 37 patients 12 had bilateral lesioning and rest unilateral.

Conclusion: Among the patients with tremor and dystonia only few can afford for Deep Brain Stimulation (DBS). So, in country like Nepal lesioning will be the only acceptable option for the management of movement disorder. In our observation both DBS and lesioning have the similar postoperative outcomes without additional complications.