Gamma Knife Surgery For Trigeminal Neuralgia- Malaysian Experience

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Purpose
Retrospective study of all cases of intractable Trigeminal Neuralgia treated with Gamma Knife in Malaysia with analysis of the outcomes and complications.

Materials and Methods
From May 2014 to April 2018 all cases of intractable Trigeminal Neuralgia treated by Perfexion Gamma Knife with a single isodose at Rectogasserian region as describe by Regis (2006) at Malaysia were reviewed with regards to age, sex and the outcome of the treatment together with possible complications like facial numbness, paraesthesia and pain recurrence.

Results
All together 36 cases of intractable Trigeminal Neuralgia including 1 case of multiple sclerosis and 1 other case of Dolichomega vascular compression were treated with Gamma Knife at the rectro-gasserian region as recommended by Regis. A control rate of more than 95% of the facial pain could be achieved although some cases still need some medications. Complication is low with facial numbness about 2 - 3%. Recurrence rate is about 15% over 4 years but symptoms usually could be controlled with medications.

Conclusion
Our result is in keeping with the published result by Regis and other authors for the treatment of Gamma Knife surgery for intractable Trigeminal Neuralgia. Gamma knife surgery is a safe and non- invasive modality and is effective in the control of intractable trigeminal neuralgia with minimal side effects and low recurrence rate.