

Commentary

Trigeminal neuralgia is a devastatingly painful condition that severely reduces patients' quality of life, and is most often managed by medical management using anti-convulsants, usually carbamazepine.^[1] However, these cases can become refractory to medical treatment and need further neurosurgical intervention. In such a situation, one dilemma that often arises in under-developed and developing countries is an access to neurosurgical care and the mode of surgical interventions available. Neurosurgical treatments can be categorized as reversible or non-reversible. Some reversible neurosurgical interventions include the injection of local anesthetic agents,^[2] alcohol^[3] and botulinum toxin,^[4] all of which can be done on an outpatient basis and even in rural practice by a trained medical practitioner or oral and maxillofacial surgeon. However, these procedures do not provide long lasting pain relief, and in the case of botulinum toxin injection, it can be very expensive. A recent issue of this journal highlighted an emerging role of transcutaneous electric nerve stimulation, which showed very promising results.^[5] However, until more evidences are available, more invasive and irreversible neurosurgical treatment appears to be the best alternative for managing refractory trigeminal neuralgia.

Invasive neurosurgical treatment includes microvascular decompression (which is non-ablative) and various ablative procedures that are performed at various sites, namely peripherally, at the Gasserion ganglion or within the posterior cranial fossa. Peripheral neurectomy is a not a new neurosurgical procedure, having been practiced since late 19th century,^[6] but documentations on its success and long term outcome is still lacking until today.^[7] Therefore, with increased sophistication in neurosurgical procedures and the ability to scan and review the Merkel's cave and Gasserion ganglion using new and highly accurate imaging modalities, the currently accepted norm to surgically manage trigeminal neuralgia has shifted from peripheral intervention to a central one. However, evidence of the benefits of invasive surgical treatment, though generally accepted, rests on anecdotal reports and case series; no clinical trials have established the efficacy of any surgical procedure.^[1] The lack of evidence leads us back to a very basic question: Is peripheral neurectomy still relevant in today's neurosurgical practice?

The answer, I believe, is a cautious yes! Anecdotal evidences have shown that some patient can be pain-free for a period up to 48 months when peripheral neurectomy is undertaken followed by the occlusion of the foramina for the nerve concerned.^[8,9] To the best of my knowledge, Ali *et al.*^[10] are the first to compare duration of

pain-free period between cases of peripheral neurectomy with and without the occlusion of the foramina, and has clearly shown that the occlusion of the foramina provide an added advantage for peripheral neurectomy. Unfortunately, the patients were not randomized. In addition, the duration of follow-up is rather short at the moment (2 years). It would be good if Ali *et al.*^[10] could provide updates in the future of the long term (5 and 10 years) outcome of this procedure. The statement by Normikka and Eldridge^[7] best summarizes the indication for performing peripheral neurectomy: "...it may be useful in cases where other treatments have failed, and patient or doctor are reluctant to consider procedures aimed at the ganglion or root."

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