Trigeminal neuralgia recurrence

To prospectively compare facial pain outcomes for patients having either a repeat microvascular decompression (MVD) or Percutaneous balloon compression trigeminal rhizotomy

A prospective cohort study of 110 patients with trigeminal neuralgia recurrence who had either redo MVD (n=68) or PBC (n=42) from July 2010 until September 2016. The mean follow-up was 45.6 months.

After redo MVD, 65 patients (95.6%) experienced immediate relief of pain. After PBC, 34 patients (81%) were immediately relieved of their neuralgia. After 1 month, the clinical effect of redo MVD was better than PBC ($p<0.01$). Patients who had redo MVD more commonly were pain free off medications (93.4% at 1 year, 78.2% at 4 years) compared with the PBC patients (85.1% at 1 year, 59.3% at 4 years). However, mean length of stay was longer ($p>0.05$). Patients after PBC who occurred developed herpes simplex (35.7%), facial numbness (76.2%), annoying dysesthesia (21.4%) more frequently compared with patients after redo MVD who occurred developed herpes simplex (14.7%), facial numbness (8.8%), hypoesthesia (5.9%) ($p<0.05$). The symptoms recurred respectively in 15 patients (22.1%) and 19 patients (45.2%) after redo MVD and PBC within the entire 6-year follow-up period.

For the patients with TN recurrence, redo MVD was a more effective procedure than PBC. The cure rate and immediate relief of pain were better, and the incidence of complications was lower [1].

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Chen JN, Yu WH, Du HG, Jiang L, Dong XQ, Cao J. Prospective Comparison of Redo Microvascular Decompression and Percutaneous Balloon Compression as Primary Surgery for Recurrent Trigeminal Neuralgia. J Korean Neurosurg Soc. 2018 Aug 7. doi: 10.3340/jkns.2017.0196. [Epub ahead of print] PubMed PMID: 30081435.