Recurrent Trigeminal Neuralgia Following MVD – What Is The Best Treatment?

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MVD is a time-tested method of treatment for primary Trigeminal Neuralgia (TN). It provides instant relief, rarely has complications and mortality is almost nil. Teflon is most favored material because of tissue acceptance, lack of resorption, little risk of dislocation & overall low potential for complication. Failure of MVD can be avoided by meticulous attention to all details throughout the MVD procedure. There are two issues post MVD: 1) Persistent pain (no relief at all) & 2) Recurrent pain (initial relief but not sustained). Causes of persistent pain could be wrong diagnosis, wrong operation and or not attending to all conflicting vessels. The incidence of recurrent pain are: insufficient decompression (Not attending to all vessels, esp’ly veins), teflon related (either too small or too large or dislocation or granuloma (3/200) and Unknown cause (no neuro vascular compression (NVC) seen) - (H-H Capelle et al, 2010). Teflon granuloma has been described to occur in 1% to 7.3% of cases of recurrent TN. Amongst choices available for treatment, repeat MVD (70%) results are superior to those of SRS (70%), GR (46%), BC (43.5%) & RFTC (27.1%). Repeat MVD for recurrent TN may be combined with Partial Sensory Rhizotomy (PSR), particularly if neurovascular conflict is not evident. Surgical findings at repeat MVD includes, new vascular compression (arterial or Venous source). Scarred Ivalon sponge/Teflon with mass effect: It could be negative of any cause (61%), most of whom (83%) having undergone PSR. Complications after repeat MVD are facial numbness (27%) & hearing loss (03%).

In summary, management of TN needs correct clinical diagnosis, improved MRI reading and meticulous surgery by experienced neurosurgeon. Despite these criteria, there may be some patients with persistent / recurrent pain. Best management lies in re-doing MVD with the same meticulousness, and may be combined with PSR. Teflon Granuloma is a rare complication, which is amenable to re-surgery.