

Microvascular decompression gives durable pain relief in glossopharyngeal neuralgia, with low recurrence but non-zero risk, so careful selection and follow-up are essential

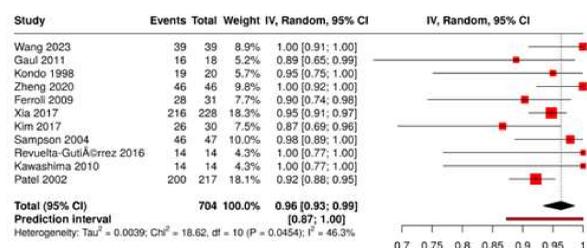
Introduction

1. Rare craniofacial pain syndrome with sudden, stabbing throat/ear pain
2. Often severely disabling; many patients respond to meds, but some don't
3. Microvascular decompression (MVD) is the only potentially curative option (treats neurovascular conflict)
4. Existing evidence is mostly small series → durability/safety not well-defined
5. Aim: pooled estimates of immediate & long-term pain relief, recurrence, and mortality after MVD

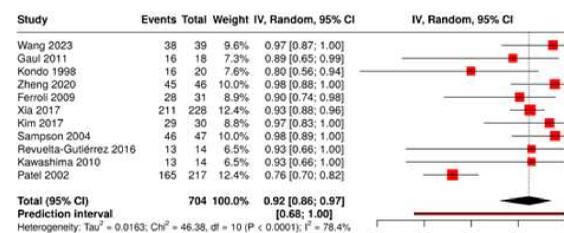
Methods

1. Systematic review/meta-analysis (PRISMA)
2. Databases: PubMed, Embase, Web of Science
3. Search through Aug 2025
4. Included: cohorts ≥5 patients undergoing MVD for GPN
5. Outcomes: immediate pain relief, durable pain relief (last follow-up), recurrence, perioperative mortality
6. Random-effects (DerSimonian–Laird); proportions stabilized (Freeman–Tukey)
7. Heterogeneity: I^2 ; prediction intervals for real-world estimates

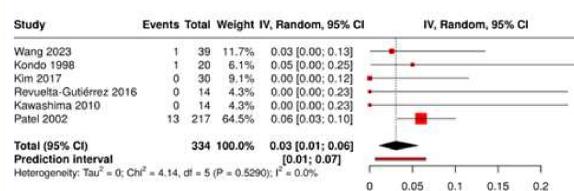
Immediate pain relief



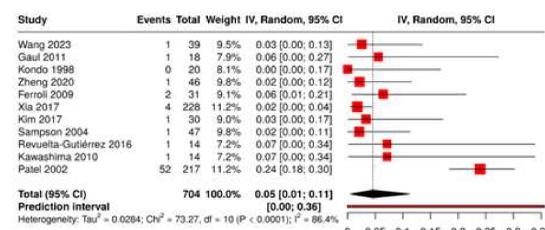
long term pain relief



Mortality results



Recurrence



Results

1. Systematic review/meta-analysis (PRISMA)
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Discussion

1. MVD provides high immediate and sustained pain relief for most GPN patients
2. Recurrence is low overall but varies widely across centers/follow-up duration
3. Mortality is uncommon, supporting an overall favorable safety profile
4. Emphasizes need for careful long-term surveillance and standardized reporting
5. Findings support MVD as a durable, effective option when medical therapy fails

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