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A Case-Series Comparing Time to Surgical Management of Trigeminal Neuralgia Patients Prescribed Lacosamide Versus Standard of Care

Amrita Mohanty MD¹, Honor Magon MD², Saurabh Gombar MD², Anuj Aggarwal MD¹

¹Department of Anesthesia, Perioperative, and Pain Medicine, Stanford University School of Medicine

²Atropos Health, Inc

Introduction

- Trigeminal neuralgia (TN) is a condition that causes sudden, intense unilateral facial pain.
- Standard of care (SOC) carbamazepine and oxcarbazepine are aromatic anticonvulsants, a class strongly associated with Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS), while lacosamide is in a newer, less-implicated class.
- In this case series, we present data on patients with TN and the incidence of microvascular decompression (MVD) and rhizotomy following the initiation of lacosamide treatment compared to SOC

Materials and Methods

- We examined 23,036 adult patients with TN between 2010 and 2024.
- 253 adult patients with TN initiated on lacosamide following a trial of SOC were identified along with 64 patients who were solely prescribed lacosamide with no prior history of initiation of SOC.
- All patients were required to have at least 90-days of clinical history prior to initiating therapy and no history of seizures prior to treatment.
- Median time from the date of initiating pharmacologic treatment to intervention was studied.

Results

- Of patients prescribed SOC, 3.1% underwent MVD and 2.8% underwent rhizotomy.
- Of patients prescribed SOC followed by lacosamide, 10.0% underwent MVD and 9.6% rhizotomy.
- For patients prescribed lacosamide, with no prior history of initiation of SOC, 3.3% underwent MVD and 4.8% rhizotomy.
- Median time to procedure for SOC patients was 1313 days for MVD and 1318 days for rhizotomy.
- Median time to procedure for solo lacosamide therapy was 734 days for MVD and 593 days for rhizotomy.

Fig 4: Percent of patients prescribed therapy that underwent procedure

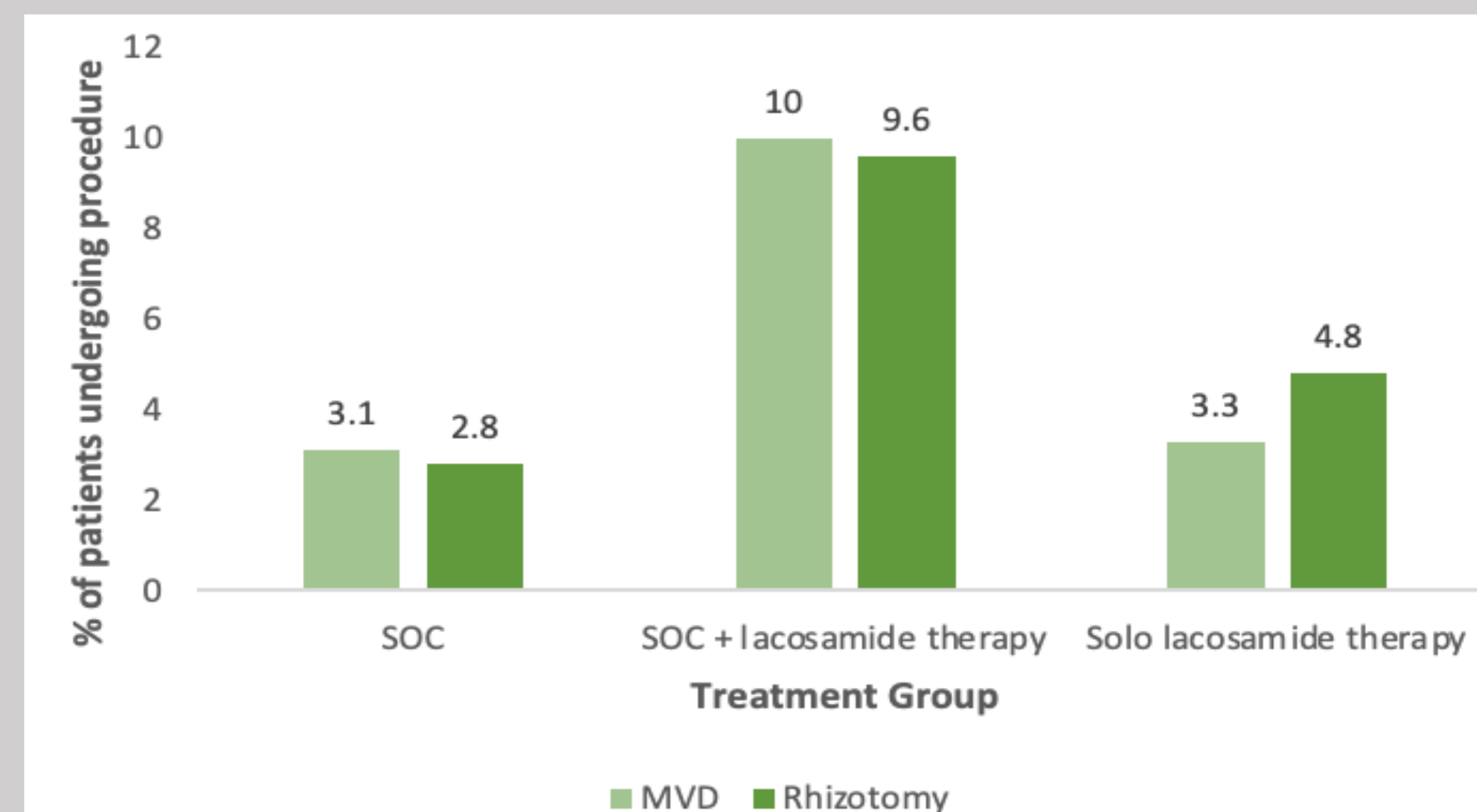
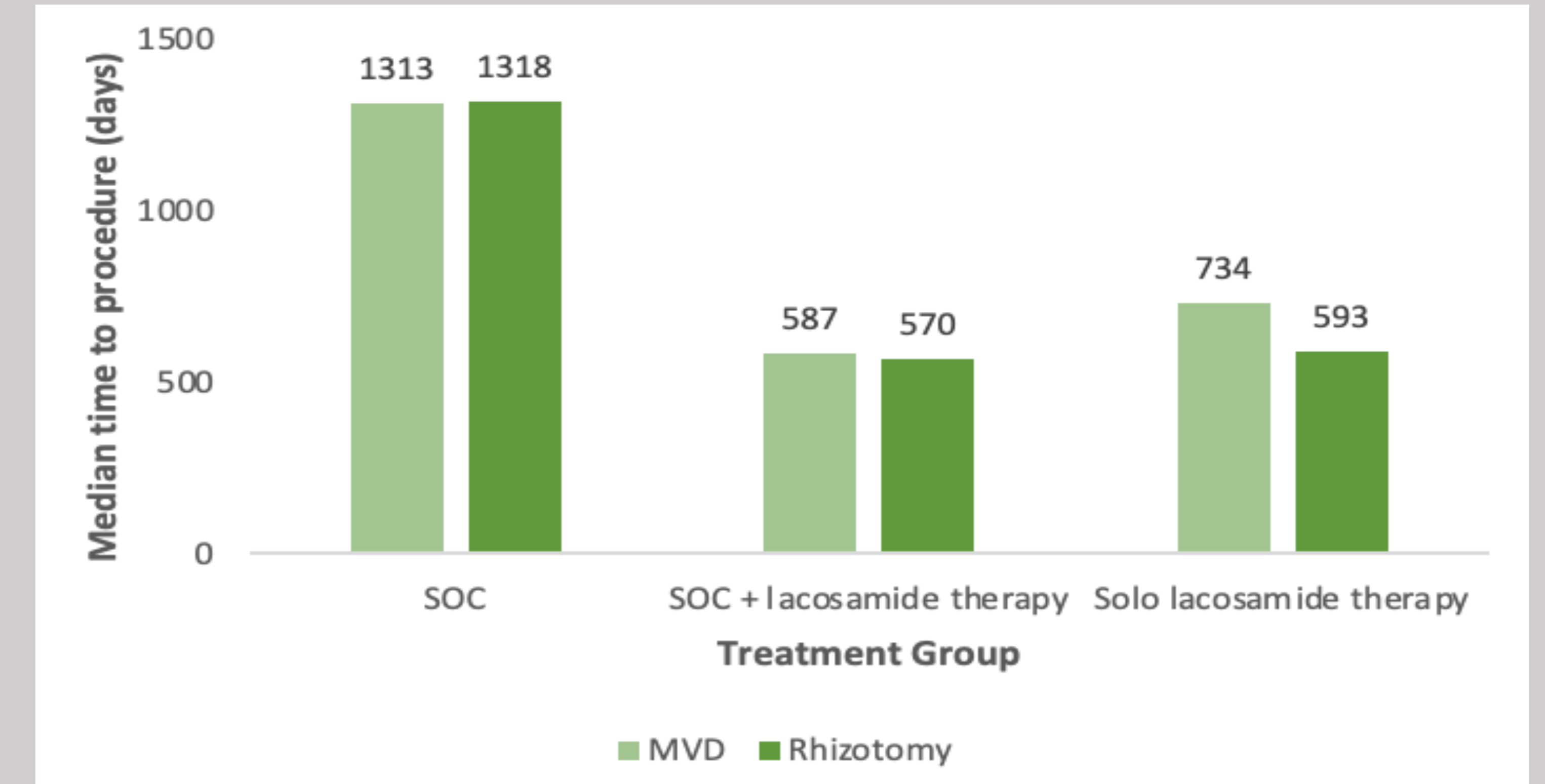


Fig 5: Median time to procedure



Discussion

- When compared to standard of care, lacosamide solo therapy demonstrated similar rates of procedural management.
- Future studies would benefit from future controlled trials to evaluate lacosamide's efficacy for TN
- Lacosamide provides a promising alternative to traditional aromatic anticonvulsants used for TN, avoiding potential harmful side effects such as DRESS.

References

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