Geniculate Neuralgia

Michael Horowitz, MD
Pittsburgh, PA
Geniculate Neuralgia (GN)

- Severe, lancinating intermittent or constant pain localized to the deep ear canal
- Often described like an “ice-pick” being pushed into the deep ear canal
- Pain may also involve the surface of the ear but patient must have deep ear pain as well
- Pain rarely responds to medical therapy such as Tegretol or pain relief medications
Differential Diagnosis

- GN
- Neoplasm
- Herpetic infection (Ramsay Hunt Syndrome)
- Ear canal infection
Evaluation

- Head CT
- Head MRI
- Otolaryngology evaluation
- Hearing evaluation
Treatment

- Microvascular decompression of
  - Vagus nerve (CN 10)
  - Glossopharyngeal nerve (CN 9)
  - Trigeminal nerve (CN 5)
  - Sectioning of nervus intermedius
Benefits and Risks

- **Benefits**
  - >90% incidence of pain relief with 10-15% incidence of pain recurrence over 15 years

- **Risks and side effects**
  - Stroke (<3%)
  - Death (<1%)
  - Hearing loss/reduction (<10%)
  - Facial paralysis/weakness (<3%)
  - Double vision (<3%)
  - Infection (<5%)
  - Spinal fluid leak (<10%)
  - Difficulty swallowing (<5%)
  - Decreased tearing, decreased salivation, numbness behind ear, decreased sense of taste (secondary to sectioning of Nervus Intermedius) (>90% chance)