

## Temporal Artery Biopsy

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## Good procedural video and text:

http://emedicine.medscape.com/article/1520091-overview

- do within 5 days (up to 2 weeks) of steroid initiation.
- before biopsy, try to occlude artery make sure no neuro deficits (e.g. ICA occlusion → STA-ophthalmic artery anastomosis for collateral flow).
- anesthesia: local  $\pm$  monitored IV sedation.
  - 1% lidocaine mixed 1:1 with 0.25% Marcaine with 1:200,000 epinephrine; Dr. Broaddus avoids epinephrine as artery goes into spasm may be difficult to find intraop.
- position supine with head rotated on gel donut.
- superficial temporal artery course is outlined using finger **palpation** / handheld **Doppler** probe.
- incise scalp (skin and subQ) along artery course; develop plane above fascia artery is seen *under superficial fascia*.
- artery is dissected and at least 3 cm segment is excised and sent for permanent pathology.
  - artery is located between superficial and deep temporal fascia leaflets.
  - when dissecting artery, spread mosquito tip parallel to artery to avoid its rupture.
- artery ends are closed with Hemoclips / 3-0 silk.
- galea is approximated with 4-0 Vicryl in interrupted fashion.
- skin is approximated with DermaBond / intracuticular 4-0 Monocryl running suture.

Viktor's Notes<sup>™</sup> for the Neurosurgery Resident

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