

Mini-Incision Carotid Endarterectomy



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Nothing to declare. No disclosures

CEA: Zero Complications

What if the results of CEA turn out to be statistically better than CAS?

Operation vs Puncture !!

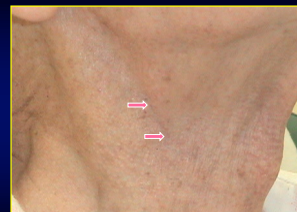
Carotid Endarterectomy



Mini incision CEA

- 1. One inch cut-down*
- 2. No deaths*
- 3. No strokes*
- 4. No MI*
- 5. No nerve damage*

Is It Feasible?





Protocol

Patient Selection

1. Cardiac work-up: stress test - < MI
2. Serum creatinine < 3 mg/dL - < mortality
3. Three month interval between CEAs - < CHS



Mini-Incision CEA Results: 383 consecutive cases
52% asymptomatic

Complications

MI (0%)
Stroke 2 (0.5%)
Nerve injury (0%)
30-day death 1 (0.26%)

All patients checked perioperatively by the NYU stroke team

Mini skin incision for carotid endarterectomy (CEA): A new and safe alternative to the standard approach

Enrico Ascher, MD, Amit Hingorani, MD, Natalie Marks, MD BVT, Richard W. Schurrer, MD, Alexander Morya, MD, Sarah Nelson, MD, William Endersby, BFA, and Thomas Jacoby, PhD, Brooklyn, NY

Purpose: Patients requiring surgery are naturally attracted to shorter incisions because they tend to cause less pain and are aesthetically more appealing. To retrospectively determine the length of standard skin incisions it is 7 inches for carotid endarterectomy (CEA), we used preoperative duplex to outline the carotid bifurcation as well as to document

JVS 2005

Average length of incision: 1.4 ± 0.5 inches
(3.5 cm ± 1.2 cm)



A Short Incision for Carotid Endarterectomy Results in Decreased Morbidity
 E. Bastounis, C. Bakoyannis, C. Cagiannos, C. Klonaris, C. Pili, I.E. Bastounis and S. Georgopoulos
 First Department of Surgery, University of Athens Medical School, "Lasko" General Hospital, Athens, Greece
 Objectives: To investigate the effect of a short incision ($\leq 5\text{ cm}$) on the complication rate of the carotid endarterectomy (CEA).
Eur J Vasc Endovasc Surg 2007

769 CEA ≥ 5 cm length of incision: 13.5% nerve deficit
279 CEA ≤ 5 cm length of incision: 2.9% nerve deficit
p <math>< 0.001</math>

Carotid endarterectomy remains cost-effective for the surgical management of carotid stenosis
 Naithe D Sridharan, Rabih A Chert, Kenneth Smith, Mohammad H Elami
J Vasc Surg 2022

MARKOV state-transition model to quantify lifetime costs in the USA
 TCAR: \$166,642/QALY
 CEA: \$199,000/QALY

Treatment Modalities

- **Standard CEA:** No stent, long incision, more nerve injury
- **Transfemoral Carotid stenting:** Stent, no incision, less nerve injury
- **T-CAR:** Stent, small incision, less nerve injury, more expensive
- **Mini-Incision CEA:** No stent, small incision, less nerve injury, cheaper



Try the mini-incision technique.
 Your patients will love it!

Thank you