

All Asymptomatic Carotid Stenosis Patients are Best Treated Medically:

Invasive Treatment Causes More Harm Than Good & Should NOT Have Been Widely Reimbursed by CMS

DEBATE

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Disclosures

- I am a neurologist
- My academic work has been supported only by independent grants
- Founder of the Faculty Advocating Collaborative & Thoughtful Carotid Artery TreatmentS: FACTCATS.org



Good News for All: Stroke Prevention- More Effective, Less Invasive & Cheaper!

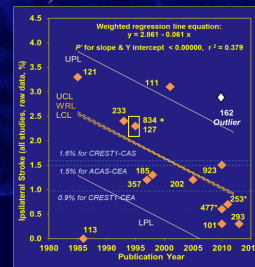
Advanced (50-99%) ACS + Non-invasive Intervention Alone

Annual Ipsilateral Stroke Rate (Raw data, %)

1.7% fall in Absolute Rate

≥67 % fall in Relative Rate to 0.8%

1985-2013



Abbott, *Front Neurol*, 2022

≥56% lower since ACAS! No current procedural indication!



No More Than About 2% of ACS Patients Will Have Stroke Caused by it During Life!

- Average annual ipsilateral stroke rate was 0.8%
- Average age of diagnosing 50%-99% ACS: 70 yrs
- Average survival was 10 years (0.8 x 10 = 8%)
- About half the strokes ipsilateral to 50%-99% ACS are not due to the stenosis (0.5 x 8 = 4%)
- ≥50% fewer strokes with current BMT alone (<2%)

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But there Will Always be Procedural Risk

- Best case scenario is overall futility/waste: Even if total procedural complication rate is always 0
- No current CEA indication
- CAS is worse than CEA
- No proven indication for TCAR
- So provide current best non-invasive care alone to all



Abbott, *Front Neurol*, 2022

So How Can Dr Perler Call for CEA/CAS on 25% ACS Pts? His Rationale is Scientifically Flawed & In Many Ways!

Flawed Rationale

Admits non-invasive care has improved outcomes & proclaims value of Level 1 (RT) Evidence BUT

- Has no *current* Level 1 evidence of procedural benefit
- Nor do the guidelines he cites
- Both ignore only highly selected men had net CEA benefit
- Ignore excess harm with CAS (& TCAR) c/w CEA
- Still cites outcomes with suboptimal MT in RTs (VA, ACAS, ACST1) & non-RTs (Oxford Vascular Study, ACSRS)
- Speculation: eg, procedures reduce stroke vs current BMT, improve cognition
- Conjecture that 25% ACS pts have 'CEA benefit' incorrect

Veithsymposium 2023, Nicolaidis et al. & Abbott, JVS, 2010; Abbott, Lancet Neurol, 2021

25% Derived from Too Low a CEA Threshold & Outdated Research

ACSRS Study:

- Stroke risk stratification study of 923 patients with $\geq 70\%$ ACS
- Given long outdated non-invasive arterial care alone
- 15% had an annual ips stroke rate of 2-4%
- 9% had an annual ips stroke rate of $>4\%$
- Dr Perler added these & rounded 24% to 25%

BUT:

- Only consider safest procedure with $\geq 4\%$ annual ips stroke rate
- Non-invasive arterial care has improved by $\geq 50\%$ since ACSRS!

Veithsymposium 2023, Nicolaidis et al. & Abbott, JVS, 2010; Abbott, Lancet Neurol, 2021, Munster et al, Neurology, 2015;85:1-8

Conclusions

- Current best practice non-invasive arterial care **alone** for all with asymptomatic carotid arterial disease.
- It will remain that way unless ≥ 1 sub-group is identified with additional benefit with a procedure

Abbott, Front Neurol, 2022

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<https://esvs.org/> (search 'Ukraine')