AB034. TIA to CEA: time from symptoms to surgery for carotid endarterectomy at a tertiary referral centre

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Background: Stroke is the leading cause of disability and second leading cause of death globally. Carotid artery stenosis accounts for 10-15% of ischaemic strokes. Carotid endarterectomy (CEA) is a surgical method of stroke risk reduction in patients with high-grade stenosis. Best evidence recommends CEA within 14 days of an acute neurological event in patients with ipsilateral stenosis >70% to confer maximum preventative benefit.

Methods: Retrospective review of all CEAs from January 2017–July 2018, calculating time from symptom onset to CEA, and hospital referral to CEA.

Results: One-hundred-and-eighteen CEAs were performed on one-hundred-and-thirteen patients. Eighty-six (74%) patients were male. Median (range) age was 69.0 (45–87) years. Seventy-five (63.6%) carotids were symptomatic. Forty-eight (40.7%) carotids had 90–99% stenosis, fifty-eight (49.1%) had 70–90% and twelve (10.2%) had 50–69%. The combined perioperative mortality/stroke rate was 0%. Overall, the median (range) symptoms-to-surgery interval was 16.0 (1–694) days, and referral-to-surgery was 12.0 (0–1,097) days. For symptomatic carotids, median symptoms-to-surgery interval was 16 (1–694) days; 46% underwent CEA within fourteen days of symptoms, which rose to 67.6% within fourteen days of Vascular Surgery referral. Symptomatic carotids had significantly shorter referral-to-surgery interval compared to asymptomatic carotids (10 versus 75 days, P=0.001).

Conclusions: Improvement is warranted for expedient symptomatic carotid management. Rate-limiting steps include bed availability and theatre space. Further data review is needed to identify and minimise modifiable causes of delay for urgent CEA.

Keywords: Carotid endarterectomy; symptomatic carotid artery stenosis; surgical delay

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