

Exploring Outcomes of Urgent and Emergent Carotid Revascularization in the VQI

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Tables



Introduction

 Despite the few clinical indications, there were many urgent or emergent carotid procedures recorded in the Vascular Quality Initiative VQI

Objectives

 Assess outcomes of urgent and emergent carotid revascularization

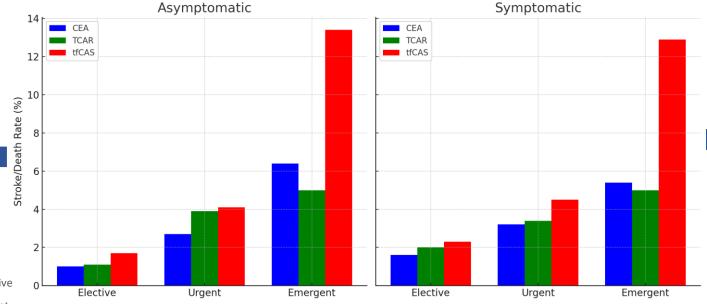
Methods

- All carotid revascularization in the VQI from 2011-2023
- Stratified by urgency status, preoperative symptoms and procedure type
- Urgency was defined by the VQI as:
 - Elective: planned/scheduled procedure
 - Urgent: surgery within 24 hours.
 - Emergent: surgery within 6 hours.

Hours.			
	Results		eat
Asymptomatic	Symptomatic		Stroke/Death
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Overall **Elective Emergent Elective vs Urgent Elective vs Emergent Urgent** N=268,091 N=45,021 95% CI 95% CI N=4,051 aOR p-value Stroke/Death 1.2% 3.2% 1.8- 2.2 < 0.01 3.7 3.0-4.4 < 0.01 10% Death 0.3% 1.1% 7.2% 2.6-3.7 < 0.01 8.6 6.4-11.4 < 0.01 < 0.01 2.2 1.7- 2.8 Stroke- any 1.0% 2.5% 4.5% 1.8 1.6-2.0 < 0.01 **Asymptomatic** N=208,613 N=15,063 N=1,095 Stroke/Death 1.0% 3.0% 9.9% 3.9-7.6 < 0.01 2.2-2.9 9.8- 24.6 < 0.01 Death 0.2% 1.3% 7.3% Stroke- any 0.9% 2.1% 3.8% < 0.01 2.7 1.7-4.3 < 0.01 1.8- 2.5 **Symptomatic** N=59,478 N=29,958 N=2,956< 0.01 3.1 2.4-3.9 Stroke/Death 1.5- 1.9 < 0.01 1.7% 3.3% 11% 7.4% 3.8-7.7 **Death** 0.4% 1.0% < 0.01 < 0.01 Stroke -any 1.5% 2.6% 4.8% < 0.01 1.9 1.4-2.6 < 0.01 1.4- 1.8

Stroke/Death Rates by Procedure and Urgency



Results

- Perioperative stroke/death rate
 - in symptomatic patients
 - 1.7% for elective procedures.
 - 3.2% for urgent procedures
 - 11% for emergent procedures
 - In asymptomatic patients
 - 1% for elective procedures.
 - 3% for urgent procedures
 - 9.9% for emergent procedures
- CEA and TCAR were associated with lower risk of stroke/death in symptomatic patients for both urgent and emergent.
- The risks of adverse events with urgent or emergent revascularization exceed most estimates of the risk of recurrence in the first 48 hours following symptoms.

Conclusions

- Urgent or emergent carotid revascularization was associated with increased odds of all perioperative outcomes.
- This should be weighed against the high risk of recurrent stroke in the first 48 hours following stroke or TIA