

Prescribing Patterns of Dual-Antiplatelet Therapy After Acute Ischemic Stroke or Transient Ischemic Attack at Methodist University Hospital

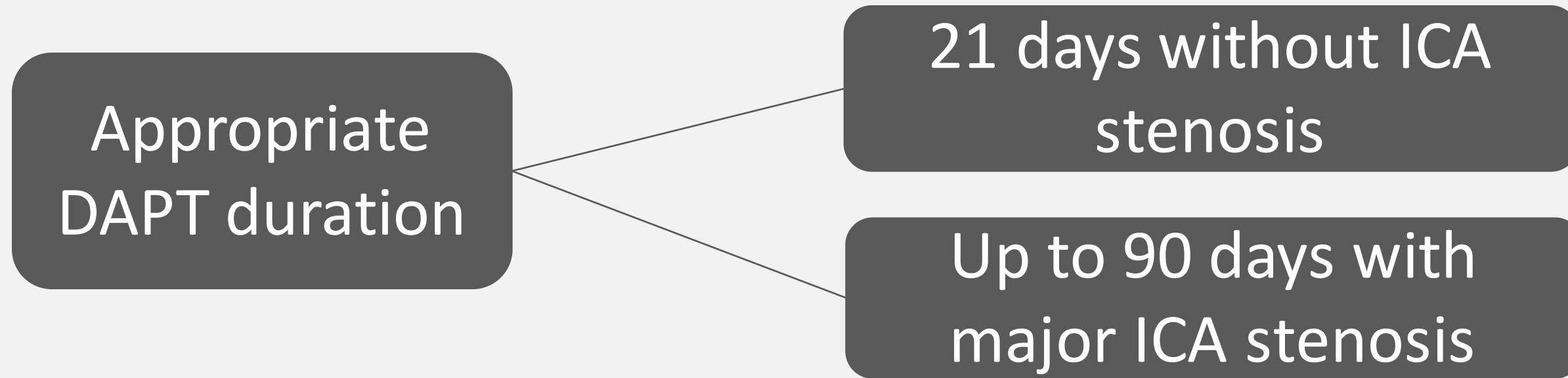
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BACKGROUND

- The risk of recurrent stroke is 3-15% in the 90 days following an ischemic stroke.¹
- Aspirin has been shown to reduce the risk of secondary stroke by approximately 20%, but there is conflicting data regarding the utility and optimal duration of the addition of a P2Y12-inhibitor (i.e. clopidogrel) to aspirin.^{1,2,3}
- Current AHA/ASA guidelines recommend dual antiplatelet therapy (DAPT) for 21 days after minor stroke/TIA or for up to 90 days if major ICA stenosis (70-99%) is present.³

METHODS

- A retrospective analysis from 7/1/2017 to 5/31/2020 of patients admitted to MUH was conducted.
- Inclusion:** Patients with acute ischemic stroke (AIS) or transient ischemic attack (TIA) prescribed DAPT with aspirin and a P2Y12 inhibitor.
- Exclusion:** stroke with cardioembolic etiology, a clear indication for anticoagulation or DAPT other than post-stroke, undetermined time of index stroke event



- Primary endpoint:**
 - Describe prescribing patterns of DAPT duration after AIS/TIA
- Secondary endpoints:**
 - Assess readmission rates
 - Compare bleed rates and recurrent stroke rates between appropriate and inappropriate DAPT groups

RESULTS

- A total of 150 patients with a mean age of 62 (±13) years were reviewed.
- 68 (45%) of patients had ICA stenosis ≥ 70% and the remaining 55% had minor stroke without stenosis.
- Half of patients (51%) were prescribed the guideline-recommended duration of 21 or 90 days at the time of discharge.

Days of DAPT	All n=150	Without stenosis n=82	With stenosis n=68
21	19 (13)	17 (21)	2 (3)
30	27 (18)	20 (24)	7 (10)
60	1 (1)	1 (1)	0 (0)
90	54 (36)	14 (17)	40 (59)
120 - 360	28 (19)	16 (20)	12 (18)
Unclear	21 (14)	14 (17)	7 (10)

Figure 1. Days of DAPT prescribed at the time of discharge after AIS/TIA. From left to right, reported as the entire cohort; patients without major stenosis; and patients with major stenosis. Data reported as n (%)

■ Boxes around duration recommended by AHA/ASA guidelines for each cohort

- A total of 119 readmissions occurred among 64 patients during the study period
- At readmission, 59 patients (50%) had DAPT documented on medication history beyond the 21- or 90-day period.
- There were 19 bleed events among 14 patients (9%).
- There were 28 stroke events among 26 patients (17%).

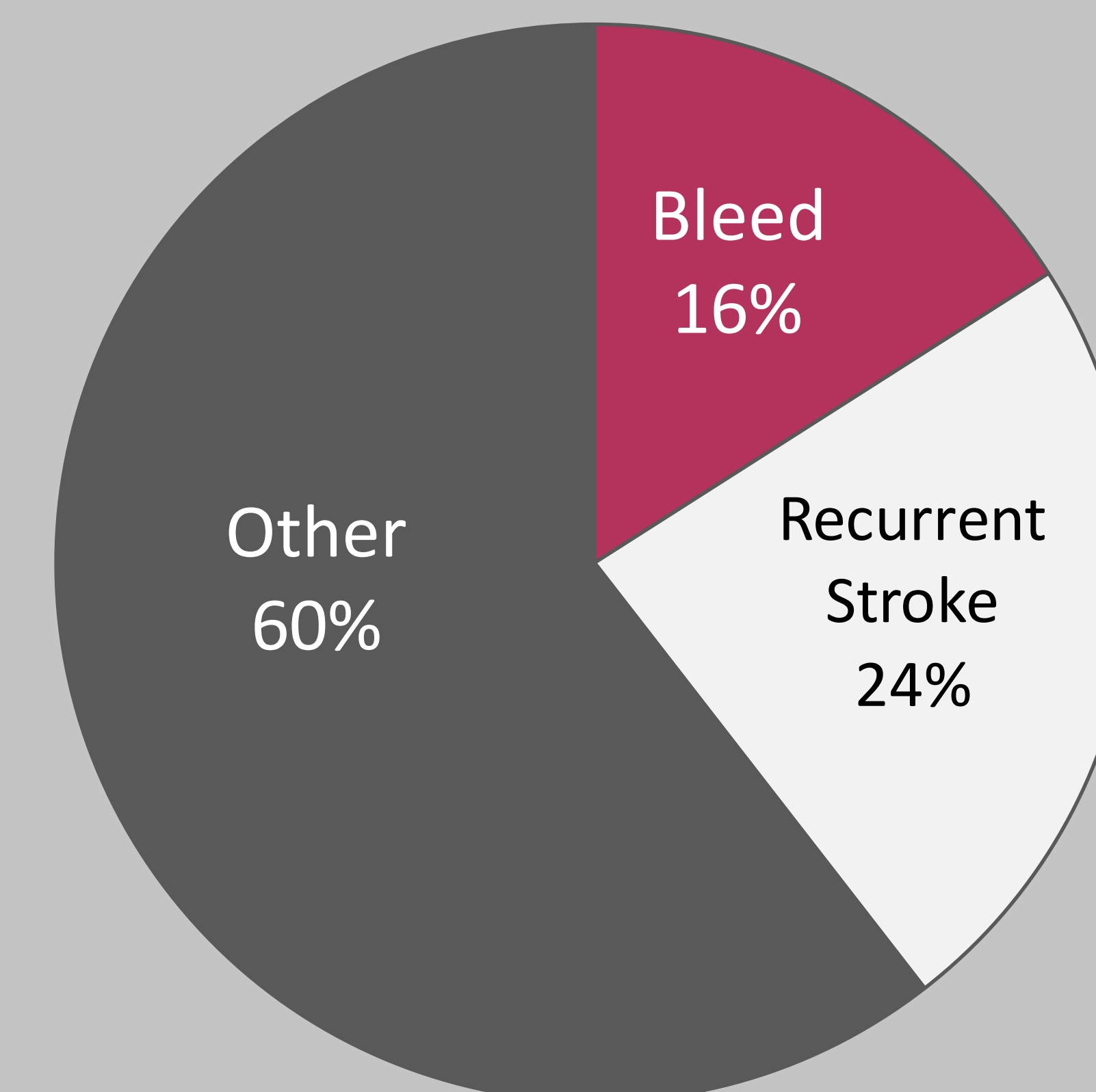


Figure 2. Reason for Admission

DISCUSSION

- Upon discharge, half of patients are prescribed DAPT for a longer duration than what the AHA/ASA guidelines recommend.
- Upon readmission to the MLH system, half of patients have DAPT documented on their medication history beyond the evidence-based duration.
- As a result of these findings, we plan to build an order sentence with 21- and 90-day durations for DAPT to assist with appropriate prescribing at discharge.
- Limitations include the retrospective design, reliance on accurate EHR documentation, and loss to follow-up.

REFERENCES

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DISCLOSURE

The authors of this study have no financial disclosures or additional conflicts to disclose.