STROKE AND MEDICATIONS

From Acute Care to Primary Care

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Speaker Disclosures

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- Clinical practice in Neurosciences and Mental Health Programs at KHSC

No conflicts of interest to disclose

Objectives

At the end of this session the participant will be able to:

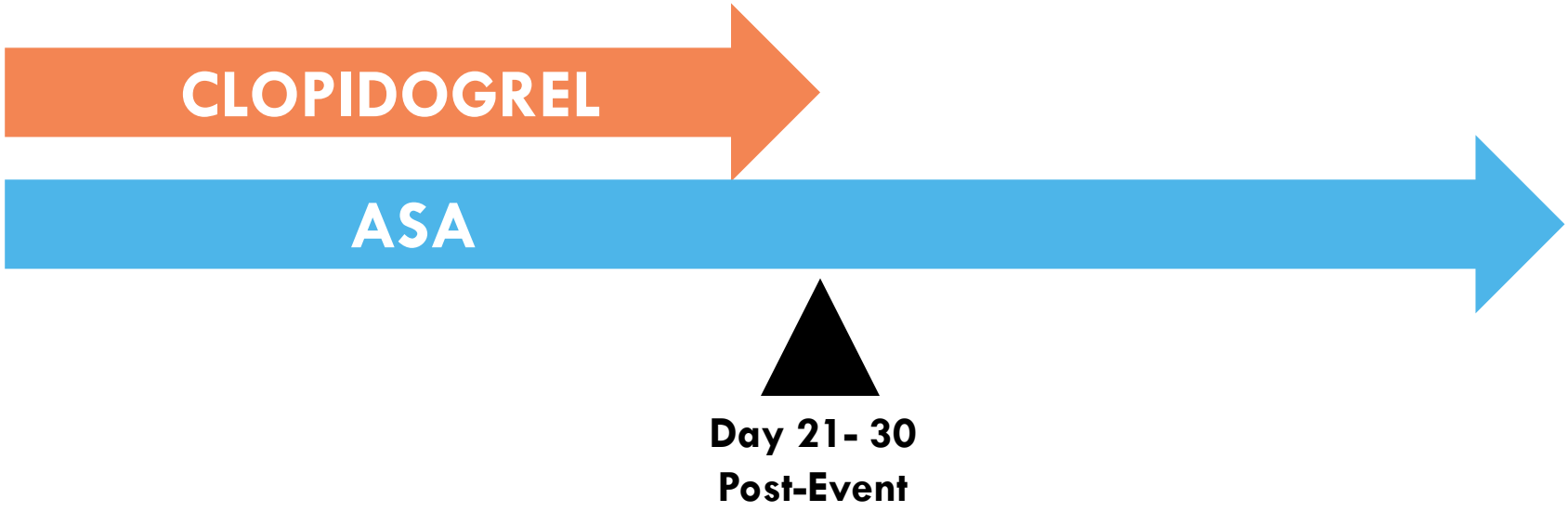
- Apply evidence for dual-antiplatelet therapy post-ischemic stroke in the discharged patient
- Incorporate drug-related factors into monitoring of anticoagulant therapy for prevention of cardioembolic stroke
- Apply evidence for new diabetes medications to the post-ischemic stroke patient
- Evaluate risks and benefits of ASA for primary prevention of cardiovascular disease

Dual Antiplatelet Therapy

Who, How Long, and Why

Dual Antiplatelets

High-risk TIA/Minor Stroke



Early DAPT prevents recurrent events (NNT 29 – 56)[1,2]

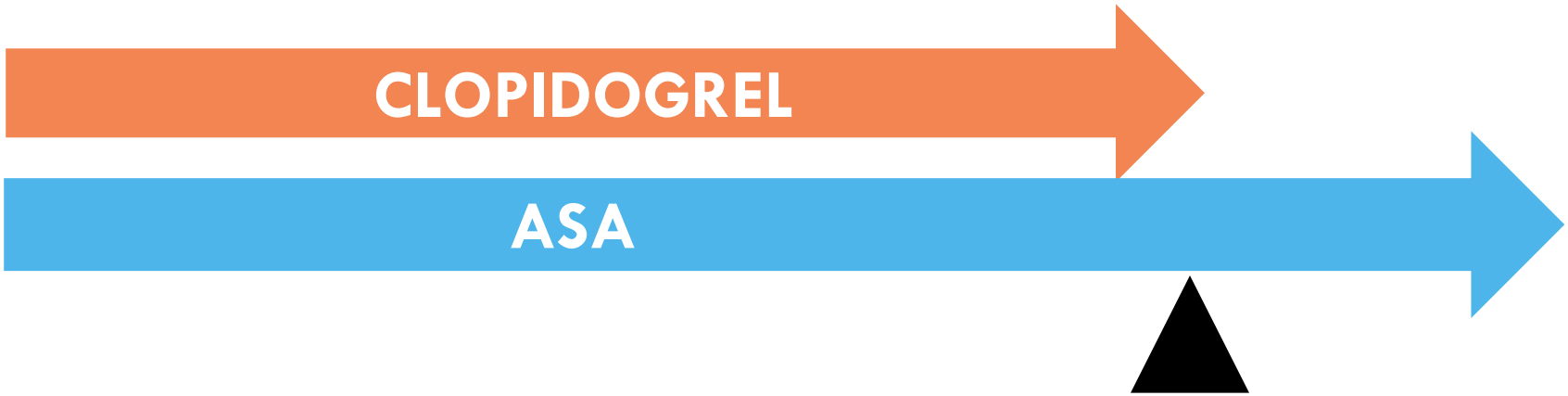
Late DAPT increases risk of major hemorrhage (NNH = 200)[2]

[1]CHANCE Trial, 2013 [2]POINT Trial, 2018

Dual Antiplatelets

Intracranial Atherosclerotic Stenosis

- 70 – 99% stenosis without surgical intervention



12.2% recurrent stroke/death[3]

vs.

up to 20% with ASA in historic controls

[3]SAMPRISS Trial, 2011

Anticoagulants

Maximizing Benefit over Risk

Anticoagulants

Meds and bleed risk

- Antiplatelets: stop UNLESS compelling indication
- NSAIDs: consider alternate analgesics, dose reduction, change to cox-2 selective, addition of PPI

Meds and fall risk

- Sedatives/hypnotics
- Gabapentinoids
- Anticholinergics
- Antipsychotics

Avoid starting
Monitor use
Lowest effective dose
Taper off if risks > benefits

Anticoagulants

Eating and Swallowing

- Dabigatran bioavailability increased by 30 – 80% if capsules opened
- Rivaroxaban bioavailability reduced by 1/3 in fasted state

Adherence

- Once daily: rivaroxaban, edoxaban
- Cost: 80 – 120$/month for DOACs vs. 10$/month for warfarin

Diabetes

New(er) Kids on the Block

SGLT2 Inhibitors

Empagliflozin
EMPA-REG, 2015

Canagliflozin
CANVAS, 2017

Dapagliflozin
DECLARE TIMI 58, 2019

GLP-1 Agonists

Liraglutide
LEADER, 2016

Semaglutide
SUSTAIN 6, 2017

Dulaglutide
REWIND, 2019

SGLT2 & GLP1 Summary

Reasonable choices for post-stroke patients needing additional control

Some caveats:

- Stroke patients less represented vs. heart patients
  - Consider cardiovascular comorbidity + overall risk
- Benefits of SGLT2 inhibitors driven by decreased MI, HF hospitalization
- Affordability, tolerability

ASA for Primary Prevention

What's new since 2018?

ASA for Primary Prevention

2019 ACC/AHA Guidelines:

"…*recent studies have shown that* ***in the modern era, aspirin should not be used in the routine primary prevention of ASCVD due to lack of net benefit.*** *Most important is to avoid aspirin in persons with increased risk of bleeding…*"

ASA for Primary Prevention

ARRIVE, 2019

Adults with moderate CV Risk (10-20% over 10 years)

No difference in symptomatic CV events or mortality

More GI bleeds
NNH = 196

ASCEND, 2018

Diabetics over age 40

Decreased symptomatic CV events
NNT = 91

More major bleeds
NNH = 111

ASPREE, 2018

Adults over age 70 living at home

No difference in symptomatic CV events or disability-free survival

More major bleeds
NNH = 100
Higher mortality
NNH = 142

ASA for Primary Prevention

Any patients under-represented in trials who may benefit?

- Young, low bleeding risk
- Multiple CV risk factors
- Difficulty optimizing lipids, BP, smoking status
- Known asymptomatic atherosclerosis

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