Kara Swafford, MD¹ • Jessica Lee, MD¹

¹Neurology, University of Kentucky

Abstracts will be considered for both poster and platform presentations

Stroke/Neurovascular

Introduction:

Atrial Fibrillation (AF) is the most common cardiac arrhythmia, with a prevalence of 5.9% in those over age 65. AF increases stroke risk 5-fold, causing 1 in 6 acute ischemic strokes (AIS). Stroke from AF carries a higher early mortality and poorer functional outcome, and risk of recurrent AIS, when compared to ischemic stroke patients in sinus rhythm, of approximately 5% in the first 2-4 weeks.

The CHADS2 score is used to estimate stroke risk of non-valvular AF. Anticoagulation is recommended for a score \geq 2 unless contraindicated. Controversy exists regarding whether AF patients with AIS should receive parenteral anticoagulation or antiplatelet therapy as a bridging method to oral anticoagulation.

Methods:

We conducted a single center retrospective chart review of patients admitted between 6/2011 and 3/2014, with diagnosis of AIS and AF (n=354), as part of quality improvement. Bleeding complications related to bridging therapy and incidence of recurrent stroke were reviewed.

Results:

Complications were seen in 24 (13.3%) patients receiving parenteral bridging anticoagulation (n=180, 50.8%), including 14 intracranial and 14 extracranial bleeding events (7.7% each). Multiple bleeding complications were seen in 2.2% (n=4). Bleeding complications were seen in 5.5% (n=9) of patients receiving antiplatelet bridging (n=161, 45.4%), with 4.3% intracranial (n=7) and 1.2% extracranial (n=2) bleeding events. None had more than one bleeding complication. Relative risk for bleeding complications with parenteral anticoagulation versus antiplatelet bridging was 2.38 (CI 1.1426 to 4.9793, p=0.02). Thirteen patients (3.6%) received no bridging and had no bleeding complications. Two patients of 354 (0.5%) had recurrent ischemic events, one each in the parenteral anticoagulation and antiplatelet groups.

Conclusions:

Preliminary data does not support bridging with parenteral anticoagulation in AIS and AF due to higher incidence of bleeding complications and low incidence of recurrent AIS. These findings may be related to the limited number of patients included in this study. A future goal is to increase the number of patients reviewed to strengthen the validity of these results.