**IMPACT OF CHA2DS2VASC SCORE ON ATRIAL FIBRILLATION DETECTION IN PATIENTS WITH CRYPTOGENIC STROKE**

**A. Abichandani**, D. Signarovitz, K. Branch, D. Prutzman, S. Agrawal, L. Sadowski,

S. Stevens, D. Traub, J. Shirani, S. Nanda

St. Luke's University Health Network, Bethlehem, PA, USA

*Introduction:*Atrial fibrillation (AF) is a leading cause of ischemic stroke. Advent of insertable loop recorders has allowed detection of occult AF in patients with cryptogenic stroke. The CHA2DS2VASc score, an indicator of progressive endothelial dysfunction, is shown to be superior to CHADS2 score in assessment of thromboembolic risk. We hypothesized that systemic causes of endothelial dysfunction are more often responsible for ischemic stroke than occult AF.

*Methods:*From October 2009 through September 2015, 202 loop recorders were implanted at our institution, of which 74 (37%) were inserted for detection of occult AF in patients with cryptogenic stroke (mean age 66 years, 51% women). Medtronic LINQ was implanted in 60 and Medtronic REVEAL XT in 14 patients. CHA2DS2VASc risk score was calculated.

*Results:*At a mean follow up duration of 12 months, occult AF was detected in 15 patients (20%) with an average time to detection of 8 months. CHA2DS2VASc scores were 5.13±1.84 and 4.97±1.56 in patients with and without occult AF (p=>0.05). There were no statistically significant differences in congestive heart failure [20% vs. 5.1%], hypertension [66.7% vs. 67.8%], age greater than 65 years [33% vs. 22%,], age greater than 75 years [47% vs. 29%], diabetes [13% vs. 32%], or vascular disease [40% vs. 59%] (p>0.05 for all) among those with and without occult AF.

*Conclusion:*Risk factors comprising CHA2DS2VASc score are highly prevalent among patients with cryptogenic stroke regardless of the presence of occult AF. This finding has implications regarding optimal long term management of cryptogenic stroke.