LAAOS III

Left Atrial Appendage Occlusion Study III

AMERICAN COLLEGE of CARDIOLOGY

Multicenter, randomized trial

OBJECTIVE: To evaluate surgical left atrial appendage occlusion compared with no occlusion among patients with atrial fibrillation (AFib) undergoing open heart surgery for another indication.

4,770 PATIENTS

INCLUSION CRITERIA: Patients undergoing cardiac surgery with cardiopulmonary bypass, AFib and CHA_2DS_2-VASc ≥2

SURGICAL OCCLUSION (N=2379)

VS.

NO OCCLUSION (N=2391)

PRIMARY OUTCOME

ISCHEMIC STROKE OR SYSTEMIC EMBOLISM AT 3.8 YEARS:
4.8% vs. **7.0% (P = 0.001)**

ISCHEMIC STROKE OR SYSTEMIC EMBOLISM <30 DAYS:
2.2% vs. **2.7% (P = NOT SIGNIFICANT)**

ISCHEMIC STROKE OR SYSTEMIC EMBOLISM >30 DAYS:
2.7% vs. **4.6% (P = 0.001)**

SECONDARY OUTCOME

ISCHEMIC STROKE:
4.6% vs. **6.9% (P < 0.05)**

REOPERATION FOR BLEEDING WITHIN 48 HOURS:
4.0% vs. **4.0%**

CONCLUSION

Among patients with AFib undergoing cardiac surgery, left atrial appendage occlusion was superior to no occlusion.

Whitlock RP, Belley-Cote EP, Paparella D, et al. Left Atrial Appendage Occlusion During Cardiac Surgery to Prevent Stroke. *N Engl J Med* 2021; May 15:[Epub Ahead of Print].

Reviewed by Anthony A. Bavry, MD MPH, FACC and Deepak L. Bhatt, MD MPH, FACC