Left Atrial Appendage Thrombus After Successful Surgical Exclusion on Anticoagulation: A Need for Closer Postintervention Monitoring

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A 59-year-old man with long-standing persistent atrial fibrillation underwent the first stage of a hybrid Maze by bilateral video-assisted thoracoscopy. Preoperative transesophageal echocardiogram (TEE) showed no atrial clot or mitral regurgitation. The left atrial appendage (LAA) was excluded with Endoloops (Ethicon, Somerville, NJ). He was discharged in sinus rhythm with prescriptions and instructions for continuing antiarrhythmic medications and warfarin. After 2 months, TEE demonstrated a 0.7-cm appendage stump (dotted arrow, Fig 1A) with thrombus (arrow, Figs 1A and 1B) despite adequate anticoagulation (INR 3.2). Six weeks later, TEE showed persistent, though smaller, thrombus (Fig 1C).

Expert consensus on atrial fibrillation recommends complete LAA occlusion. Surgical literature defines remnant LAA as a stump or pouch longer than 1 cm [1]. After exclusion, late neurologic events occur at 0.2% with excision and 1.13% with nonexcisional techniques (median occurrence, 3.6 years) [2]. This case demonstrates continued risk despite conventionally defined exclusion success. Similarly, reported endocardial thrombus after LARIAT (SentreHeart, Redwood City, CA) [3] implantation raises concerns with percutaneous techniques. These cases call for consideration of routine TEE monitoring, redefinition of successful exclusion, and improvement of current techniques.

References

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