Left Atrial Enlargement and Stroke Recurrence: The Northern Manhattan Stroke Study

Left atrial enlargement is associated with incident ischemic stroke, atrial fibrillation, and the detection of atrial fibrillation in patients with cryptogenic stroke. Less is known, however, about the relationship of left atrial enlargement and recurrent stroke. Yaghi et al, in this study, aimed to determine this association in a multiethnic cohort of patients with ischemic stroke, using the Northern Manhattan Stroke Study (NOMASS) database. Left atrial size was categorized based on anteroposterior diameter from transthoracic echocardiography. Left atrial size measurements were available in 529 patients with first ischemic stroke. Over a median of 4 years, recurrent ischemic stroke occurred in 65 patients. In multivariate models, moderate to severe left atrial enlargement was associated with a greater risk of recurrent cardioembolic/cryptogenic stroke (adjusted hazard ratio, 2.83; 95% confidence interval, 1.03–7.81). This association persisted after adjusting for history of atrial fibrillation. Prolonged cardiac monitoring, which increases the detection of atrial fibrillation after stroke, was not routinely performed in this cohort, and thus the prevalence of atrial fibrillation may have been underestimated. The finding of increased risk of recurrent stroke risk with moderate to severe left atrial enlargement has important clinical implications. Further studies will be needed to determine the best secondary stroke prevention methods in this population. See p 1488.

Diagnostic Work-Up for Detection of Paroxysmal Atrial Fibrillation After Acute Ischemic Stroke: Cross-Sectional Survey on German Stroke Units

Determining ischemic stroke cause is of utmost importance for further secondary stroke prevention. Prolonged cardiac monitoring after cryptogenic stroke enhances the detection of atrial fibrillation. The best duration for cardiac monitoring is controversial. In this article, Rizos et al present the results of a survey that was sent to stroke units throughout Germany. One hundred seventy-nine leaders of stroke units participated in the survey. All stroke patients undergo continuous ECG monitoring. In cryptogenic stroke, 90% of stroke unit leaders recommend additional cardiac monitoring. However, only 14% of these stroke units have an established pathway for prolonged cardiac monitoring in cryptogenic stroke. A total of 84% of stroke units do not use external event monitors. The use of implantable cardiac monitors is also low. A total of 28% of stroke units do not use implantable cardiac monitors, and 60% of stroke units use implantable monitors in 1 to 10 patients per year. In summary, this survey results show there is great heterogeneity among German stroke units in the workup for the detection of atrial fibrillation after ischemic stroke. Despite the recent results of the 30-Day Cardiac Event Monitor Belt for Recording Atrial Fibrillation After a Cerebral Ischemic Event (EMBRACE) trial and Cryptogenic Stroke and Underlying AF (CRYSTAL AF) trial studies which showed the importance of external and implantable event monitors respectively, there is still great variation in duration of monitoring and type of monitoring throughout stroke centers in Germany. International guidelines are needed to better standardize the monitoring for atrial fibrillation after cryptogenic stroke. See p 1693.

Cancer in Young Adults With Ischemic Stroke

Cancer predisposes to stroke through a variety of mechanisms. This study by Aarnio et al studied the relationship of cancer in ≈1000 young patients (aged 15–49 years) with first ischemic stroke from the Helsinki Young Stroke Registry. Tumors with invasive features were considered cancers in this study and basal cell carcinoma and in situ lesions were excluded. Seventy seven (7.7%) of these young patients with stroke had cancer diagnosed at any time and of these about half were diagnosed before and half after the stroke onset. Not surprisingly, lung and respiratory tract cancers were the most common malignancy. There was no cancer in patients <30 years of age. Poststroke cancer was associated with age >40 years, heavy drinking, and smoking. The cumulative risk of death was significantly higher among patients with cancer (68%) than those without (20%). In multivariate analysis, active cancer without any other apparent cause for stroke was the strongest risk factor for death when compared with patients without cancer. These results are important in showing that cancer is not uncommon in young patients with ischemic stroke. In addition active cancer at the time of stroke is a poor prognostic sign. Screening for cancer in young patients with stroke of unknown cause is strongly considered, and primary stroke prevention methods for young patients with cancer should also be considered. See p 1601.