Prognostic value of trans-thoracic echocardiography in patients with acute stroke and atrial fibrillation

Currently, ischemic stroke (which occurs when a blood vessel carrying blood to the brain is blocked) in patients with atrial fibrillation (AF), an abnormal heart rhythm characterized by rapid and irregular beating, can be successfully prevented with the therapy called oral anticoagulants. However, the administration of oral anticoagulants can cause bleeding in the brain especially during the acute phase of stroke. For this, we need to evaluate for this risk before the administration and also to estimate the possibility of subsequent stroke. An adequate evaluation consists of examining certain factors specific to each patient which includes the size of the left atrium (a cardiac chamber) evaluated by a diagnostic tool called an echography or echocardiogram. In this study, patients with acute ischemic stroke and AF, had an echocardiogram performed on them within 7 days from hospital admission.
The study enrolled 854 patients (mean age 76.3±9.5 years). Left atrial enlargement which is associated with AF, was present in 548 patients (64.2%) and out of these, 197 had a severe atrial enlargement. The risk of a subsequent stroke in these 197 patients was 11.7% at 90 days. Therein, the presence of a severe atrial enlargement in patients with acute stroke and AF, may be at a higher risk for a subsequent stroke and merit the administration of early anticoagulant therapy. So, the take home message is the following: doctors need to be aware that patients having acute stroke + AF + severe atrial enlargement = elevated risk of subsequent stroke.

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