

## **The Yield of Trans thoracic Echo (TTE) in patients presenting with thrombo embolic Stroke /TIA. Does it alter the Management?**

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Trans Thoracic Echo (TTE) is frequently used in patients presenting with ischemic stroke to detect direct source of embolism or conditions known to be associated with cardio embolism. It is also used to refine risk in conditions known to be associated with embolism. The aim was to investigate yield of TTE in aforementioned clinical scenarios and to examine if it alters patients' management.

Medical notes of all patients presenting with acute ischemic stroke (AIS) or TIA who survived to discharge were reviewed over 6 month period (May to October 07) and relevant data extracted.

There were 68 patients in total (M 32, F 36) with average age 71.3 (Range 39-91). 59 (86.76%) had TTE on admission. 18 (26.47 %) had impaired left ventricular (LV) Function, 5 (7.35%) LV dilatation and 15 (22.05%) LVH. 16 patients (23.52%) had Mitral regurgitation with 2 having calcific mitral valve disease. 13 had (19.11 %) aortic valve diseases with 7 having aortic stenosis and 6 Aortic Regurgitation. 4 patients had calcific aortic valve disease. TTE failed to detect any direct source of emboli or mural thrombus. (0% yield) 17 patients (25%) had AF, of whom 8 (11.74 %) were newly detected. TTE led to change in management in 3 patients. Among patients with clinically detected murmur, 3 out of 68 (4.4%), TTE led to change in management in 1 patient. 7 (10.29%) among all patients, had previous MI, 6 had TTE which led to change in management among 3 patients. In total, TTE led to alteration in management in 6 out of 68 (8.82%) patients, all from the newly diagnosed AF, newly detected murmur and previous MI group (yield:35.29%).

In our study, TTE failed to detect direct source of embolism. TTE had poor yield in risk stratification of thrombo embolism in the presence of normal examination and baseline investigations. However, It may be useful in select group of patients presenting with AIS/TIA.