**I’m Having A Brain Attack! : A case report on an ischemic stroke post thrombolysis for myocardial infarction**

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**Introduction:** When initiating thrombolytic reperfusion therapies for patients that present with myocardial infarction, some of the major adverse effects we take note of is the risk of intracranial haemorrhages; that will manifest as stroke-like symptoms post thrombolysis. How often do we encounter ischaemic strokes post thrombolysis? And is thrombolytic therapy to be blamed for the development of such events?

**Description:** We present a case of a 49 year old Malay gentleman with no known comorbidities, presenting with severe central chest pain. The electrocardiograph (ECG) shows ST Elevation over V1-V6, I, AVL. A bedside Echocardiogram (ECHO) demonstrates ; hypokinesia over anterior, septal and lateral walls.

Aortic root is not enlarged and there is no pericardial effussion.

He was diagnosed as acute extensive anterolateral myocardial infarction(MI). He was treated with IV Tenecteplase, resulting in succesful thrombolysis; with the ECG post thrombolysis demonstrating resolution of ST Elevation over the involved leads and improvement in the patient’s chest pain.

**Outcome:** 4 hours post thrombolysis, he complained of slurred speech. CT Brain done immediately shows no acute infarcts or intracranial haemorrhages.

He was then admitted, after which he complained of loss of nasolabial fold and expressive aphasia.

CT brain was repeated, demonstrating an acute left fronto-parietal-temporal infarct.

A formal ECHO was then performed, explaining the manifestation of the cerebrovascular event:

There are regional wall motion abnormalities as specified but in addition to that, a thrombus seen at LV(Left ventricle) apical wall 1.2cm, and second 0.95cm thrombus oscillating at LV lateral wall.

**Conclusion:** In a study done, 1% of patients with anterior MI that underwent fibrinolysis developed ischaemic stroke. This is due to the LV thrombus formation as a consequence of anterior MI. Bedside transthoracic echocardiogram or transesophageal echocardiogram is a usefool tool in aiding diagnosis. In the same study, when an acute myocardial infarction was just treated with aspirin and streptokinase, there was no difference in the LV thrombus formation rate, but when a low molecular weight heparin is added into the treatment, it significantly reduces the formation of the LV thrombus and hence a cardioembolic event.