

SCAST: Angiotensin receptor blocker in acute stroke, Shall we control blood pressure after an acute stroke?

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Blood pressure at the time of the acute presentation of stroke is almost always high. This high blood pressure is important to protect the salvageable tissue around dead area known as penumbra. It is not very clear, except in hypertensive emergencies, aortic dissection and after tissue plasminogen activator how to best manage blood pressure after stroke.

What is the study under consideration?

SCAST is the trial carried out to determine the effect of lowering of blood pressure in acute stroke with Candesartan.

What was the study design?

They recruited the patients aged 18 years or older with the clinical diagnosis of stroke presenting within 30 hours of the onset of symptoms with the systolic BP more than 140 mmHg. In definition of acute stroke they considered not only ischaemia but haemorrhage as well. They adopted fixed dose escalation regimen, 4 mg of Candesartan on day 1, 8mg on day2 and 16mg on day 3-7.

What were the results?

There were two primary effect variables: composite end point of vascular death, nonfatal MI, nonfatal stroke and

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functional status at 6 months as measured by MRS. In this trial no beneficial effect of lowering of BP with Candesartan in acute stroke was noted. Functional outcome of patients treated with placebo was more satisfactory than of the patients treated with Candesartan. For the vascular outcome there was no difference between the two treatment groups.

What this means for Pakistan?

In our population, hypertension along with intracranial atherosclerosis is very common. At the time of acute stroke, acute lowering of blood pressure may compromise the penumbra a lot leading to the extension of stroke. Thus our population is at great risk. Further data will be needed to look for the effect of lowering the blood pressure in Asians where the intracranial disease is the actual barrier for lowering the BP during acute stroke.

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Recommended Reading

1. Hankey GJ. Lowering blood pressure in acute stroke: the SCAST trial. *Lancet*. Feb 26; 377: 696-8.