DRUG THERAPY FOR TIA – IMMEDIATE CLOPIDOGREL

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Stroke is a major cause of death and disability thus leading to a huge burden (medical & economical) on the society. Transient ischemic attacks (TIA's) are most important in identifying stroke risk, making effective stroke prevention measures invaluable when such events occur.

Recently it has been shown that the early stroke risk following a TIA is much higher than previously considered: With the ABCD scoring system for clinical

Although specific measures to reduce stroke risks (such as carotid endarterectomy or stenting) are available, it is impractical to wait for such intervention without introducing immediate medical treatment in the interim and, likewise, in cases where potential interventions are not identified.

TIA's, in most cases, stem from the arterial tree due to embolic particles originating at unstable atherosclerotic plaques where thrombotic & thromboembolic processes occur.

Of all antithrombotic agents, antiplatelets were proven to be the most effective in preventing or reducing these processes: While aspirin, clopidogrel and dipyridamole alone or in combinations are all effective in slowing the coagulation cascade at the site of unstable plaques (besides statins) the key issue is how early do they become effective and exert their protective effects.

Clopidogrel (a thienopyridine derivate) is a potent antiplatelet agent used as an effective drug in all vascular beds (cardiac, cerebral & peripheral). The usual daily dose is 75 mg but its effects can be hastened by the administration of a loading dose (300-600 mg). This strategy has been used successfully in patients with unstable angina & before stent implantation for reducing the risk of cardiac events and stent thrombosis.

Also, adding clopidogrel to aspirin in patients with unstable angina was associated with a favorable long-term outcome.

The only study in secondary stroke prevention where this combination was tested and compared – the MATCH study - found no benefit in adding low dose aspirin to clopidogrel for a period of 18 month, due to bleeding side effects, yet this study did not aim for the very early post TIA/ stroke period - a period where the risk is the highest.

There is some evidence from small studies or extrapolations from larger studies suggesting a benefit for immediate clopidogrel at this period.

In this debate I will discuss this issue and indicate the potential role and the importance of immediate administration of clopidogrel to TIA patients.