

Dipyridamole/Aspirin A Viewpoint by Juhani Sivenius

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Stroke prevention using antiplatelet therapy is routine today in patients with transient ischaemic attacks (TIA) or stroke. Aspirin is the most widely used agent; other drugs with clinically established efficacy are dipyridamole and ticlopidine.

The efficacy of aspirin in the prevention of stroke has been modest: approximately 15% in major placebo-controlled trials. In addition, the optimal anti-thrombotic dose of aspirin for stroke prevention has not been established in a direct comparison in patients with TIA or stroke. Today the most frequently recommended dose is between 50 and 300 mg/day. A recent study in patients undergoing carotid endarterectomy shows that a small dose of aspirin (81 to 325 mg/day) is more effective than a larger one (650 or 1300 mg/day).^[1] There is evidence indicating lack of a dose-response relationship in patients with gastrointestinal haemorrhages and haemorrhagic stroke, but a relationship exists for gastrointestinal symptoms and treatment withdrawal because of adverse effects.

In light of data from the ESPS-2 study, com-

bined use of low-dose aspirin and extended-release dipyridamole has an additive effect compared with single-drug therapy with either aspirin or dipyridamole in patients with TIA or stroke. This combination appears twice as effective as either drug alone. This result supports the widely accepted idea in medicine that 2 or more drugs with different functions or mechanisms are more effective than either drug alone.

Unfortunately, at present, aspirin alone still seems to be the widely accepted first choice for secondary prevention of stroke in the world. Only 3 years ago 94 and 96%, respectively, of the leading experts in stroke prevention practices in Western Europe and North America reported prescribing aspirin as their first choice in patients with TIA or stroke for noncardiogenic origin.^[2] ▲

References

1. Taylor DW, Barnett HJM, Haynes RB, et al. Low-dose and high-dose acetylsalicylic acid for patients undergoing carotid endarterectomy: a randomised controlled trial. *Lancet* 1999; 353: 2179-84
2. Masuhr F, Busch M, Einhaupl KM. Differences in medical and surgical therapy for stroke prevention between leading experts in North America and Western Europe. *Stroke* 1998; 29: 339-45