Editorial

Pharmaco-Economics of Aspirin Therapy

Aspirin as an antiplatelet agent is the most commonly used drug in therapeutics. It is inexpensive while on the contrary other antiplatelet drugs are very expensive. Low dose aspirin is available in three forms, enteric coated, uncoated and the soluble tablets. The latter is used in acute situations, myocardial like acute infarction and ischaemic strokes for quicker action, usually in a dose of 300 mg for brief periods. Low dose aspirin tablets are used for porphylaxis of thromobosis in 75 mg to 300 mg doses on long term basis, usually for lifetime, unless complications like gastrointestinal haemorrhages develop. Enteric-coated aspirin tablets have been marketed with the intention of minimizing dyspepsia and gastrointestinal haemorrhages. Although it is well established that low dose uncoated aspirin tablets do not cause these problems more than the coated ones if taken with due precautions. It is imperative to emphasize that where one tablet of coated aspirin costs one and half rupee, one uncoated 75 mg tablet costs only 5 paisas. It can be easily inferred that for one patient treated with coated aspirin tablets, more than twenty patients can be treated with uncoated aspirin tablets.

In the public and charity funded institutions, where there is paucity of funds, astronomical amounts can be saved over long period of time by using uncoated tablets. There may be justification for using entericcoated tablets for old patients and those having functional dyspepsia.

For conditions like rheumatoid arthritis, formerly high doses of aspirin were used as NSAID, but currently many newer NSAIDs are being used which are not only very expensive, but also cause many serious side effects [1]. The recent example is of COX-2 inhibitor rofecoxib which was the cause of many deaths due to heart attacks and strokes. In these conditions also, aspirin is safer than many of the NSAIDs, and can be used without financial constraints.

A study comparing NSAIDs toxicity index scores of aspirin with other NSAIDs was carried out. The index score of aspirin was 1.19 while naproxens 2.17, piroxicam 2.52, diclofenac 2.6, ketoprofen 3.45, tolmetin 3.96 and indomethacin 3.99. Thus, aspirin has fair safety profile.

Reference

1. Fries et al, Arthritis. Rheumatism 1991; 34(11): 1353-61.

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