

Aspirin Hypersensitivity in an Era of Dual Antiplatelet Therapy.

While landmark studies demonstrated that dual antiplatelet therapy with aspirin and clopidogrel significantly reduces mortality and morbidity in acute coronary syndromes and coronary stenting, patients with aspirin hypersensitivity are frequently managed with clopidogrel alone with no supporting data.

Approximately 10% of the population experiences hypersensitivity to aspirin, which can manifest as asthma exacerbations, rhinorrhea, angioedema, urticaria, and anaphylaxis.

The hypersensitivity reaction is mediated through aspirin-directed antibodies or by excessive leukotriene production. The desensitization process involved depletion of these mediators, as well as down-regulation of leukotriene receptors. Wong and co-workers have developed rapid protocols to desensitize patients with aspirin hypersensitivity safely and effectively.

This protocol provides benefits over other protocols with its low starting dose and completion in less than 3 hours, low incidence of adverse effects, and high success rate in aspirin.

Time	Dose of Aspirin
0	0.1 mg
15 Min	0.3 mg
30 Min	1 mg
45 Min	3 mg
60 Min	10 mg
1:15 Hrs	30 mg
1:30 Hrs	40 mg
1:45 Hrs	81 mg
2 Hrs	162 mg
2:15 Hrs	325 mg

Some patients may require pretreatment with

- 1) A selective leukotriene receptor antagonist (montelukast; Singular[®] 10 mg daily)
- 2) Diphenhydramine 25 mg po BID x 48 hrs
- 3) Ranitidine 150 mg po BID
- 4) Allegra 180 mg po daily.

BMS for coronary stenting is preferred due to a shorter duration of dual therapy and patient can be switched to Clopidogrel alone later for lifetime therapy.