A CASE OF MISTAKEN ASPIRIN ALLERGY
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PRESENTATION OF CASE
58-year-old female patient from Kerala, a known case of diabetes mellitus type 2, systemic hypertension, dyslipidaemia referred from a local hospital with a history of effort angina of 4 months duration. TMT performed was positive for inducible ischemia. Patient underwent coronary angiogram which revealed LMCA with 60% stenosis and ostial LAD lesion of 60% stenosis. She was initiated on dual anti-platelets, statins and beta-blockers. She showed extensive cutaneous urticarial reaction to enteric coated aspirin. No history of allergy to NSAIDs/ Asthma/ Nasal Polyps/ Rhinosinusitis or Urticaria in the past.

CLINICAL DIAGNOSIS
Aspirin Allergy.

DISCUSSION OF MANAGEMENT
With a probable diagnosis of 'Aspirin allergy'. Rapid desensitisation of aspirin was performed in-hospital with increasing doses of dispersible aspirin. A total of 325mg of dispersible aspirin was given and patient didn't show any signs of allergy. So, patient was restarted on enteric coated aspirin of 75mg from the following day. After 4 hours of ingestion of the tablet patient developed extensive urticarial rashes all over the body which was managed with antihistaminics and hydrocortisone. On day three a trial dose of plain non-enteric coated aspirin of 25mg was given but patient tolerated the dose. The dose was increased, and patient started receiving 100mg of plain aspirin daily which was tolerated very well.

Patient later underwent successful angioplasty with stenting from LMCA to proximal LAD and is on fixed regular dose of plain aspirin.

Aspirin is cornerstone of therapy in patients with acute coronary syndrome or patients planned for elective coronary artery intervention. A small minority of patients are hypersensitive to Aspirin. It can manifest as Aspirin exacerbated respiratory tract disease [AERT], urticaria/ angioedema or anaphylaxis. The prevalence of aspirin induced urticaria varies from 0.07% to 0.2% in general population. Most patients with aspirin sensitivity are able to undergo desensitization therapy safely and successfully except in cases of chronic idiopathic urticaria. There are many protocols available for safe aspirin desensitisation. The Aspirin is routinely available in the market as enteric coated tablet. Enteric coating is a polymer barrier applied on oral medication that prevents its dissolution or disintegration in the gastric (acidic) environment. Aspirin is a gastric irritant; therefore, it has enteric coating so that it dissolves only in small intestine and reduce the incidence of gastritis. Extensive search on google scholar, PubMed and other scientific article search engines available on internet did not yield any case report regarding allergy/ sensitivity to enteric coating used for drug (aspirin). The enteric coating used for Aspirin contains non-toxic edible film coating dry powders and aqueous enteric coating suspensions. The dry powders and aqueous suspensions include polyvinyl acetate phthalate, a plasticizer such as polyethylene glycol/ Triacetin, an auxiliary film forming polymer such as microcrystalline cellulose/ hydroxypropyl methyl cellulose, fumed silica and pigment material. Here we suspect that the urticarial reaction of the patient was consequence of sensitivity to polymer/ phthalate being used for enteric coating. Allergy to Phthalates is a well known entity in the adults.

Most of the patients who fail 'Aspirin desensitisation' usually undergo coronary artery bypass graft surgery (CABG). Our patient too was considered for CABG with single antiplatelet. Since patient tolerated plain aspirin and she underwent PTCA under dual antiplatelet therapy (DAPT), we could avoid an un-necessary surgery. If the allergy is detected with enteric coated aspirin, then give a trial of low dose plain aspirin and subsequent higher dose if well tolerated.

FINAL DIAGNOSIS
Sensitivity to Polymer/Phthalate used for Enteric Coating in Aspirin.

REFERENCES