

Role of Pharmacogenomic Testing in Managing Acid Reflux Esophagitis Refractory to Antiacid Therapy

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1. Clinical Image

12 years old girl with gastro-esophageal reflux disease (GERD) presented with persistent heartburn, vomiting and dysphagia for few years despite being on appropriate dose of omeprazole twice daily and ranitidine before bed time. She underwent esophagogastroduodenoscopy (EGD) which showed significant esophagitis in the lower two thirds of the esophagus (**Figure 1**). Impedance probe testing showed high acid indices despite therapy. Because of her poor response to anti acid therapy, CYP2C19 genotype was checked and she was found to be (1/17) which is a rapid metabolizer phenotype. Her antacid therapy was changed to rabeprazole (AcipHex). She reported clinical improvement within 2 weeks. Her repeat EGD after 6 weeks of therapy showed significant improvement in her esophagitis (**Figure 2**).

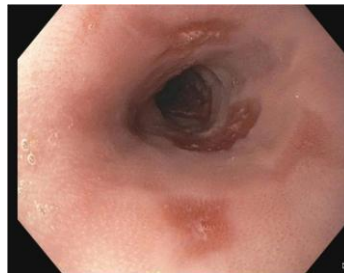


Figure 1: EGD showing esophagitis on conventional anti-acid therapy before pharmacogenomics testing.



Figure 2: EGD showing resolution of esophagitis 6 weeks after switching to Rabeprazole.

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