CRUSHING THE UNCRUSHABLE: A RESISTANT HELICOBACTER PYLORI

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Introduction
• Helicobacter pylori (Hp) is a gram-negative bacteria that colonizes the human stomach - associated with chronic gastritis and lymphoma.¹
• Disease prevalence is estimated to be over 35% in the United States²
• In the adult population, medication adherence can be limited due to a variety of factors including education, route of administration, length of treatment and bioavailability.

Case Presentation
• A 37-year-old female presented with hematemesis and abdominal pain.
• EGD showed a non-bleeding gastric ulcer with a visible vessel.
• Biopsy revealed abnormal B cell rich lymphoblastic – infiltrates suggestive of chronic gastritis. Associated most likely with (Hp).
• Received four separate courses of triple therapy with addition of bismuth and metronidazole, without resolution of symptoms.
• repeat EGD - Hp was susceptible to all previous antibiotics.
• Further hx revealed systematic childhood trauma with swallowing pills resulting in crushing of medication rendering them ineffective.

Discussion
• We present a case of persistent positive Hp after the failure of multiple regimens due to crushing pills rendered ineffective by that process.
• While medication compliance was assessed, the element of crushing pills was never assessed until after four lines of therapy and until after susceptibilities were performed per EGD biopsy.
• Common Hp treatment that are inactivated by crushing include pantoprazole, lansoprazole, omeprazole, amoxicillin extended release, doxycycline, metronidazole extended release, clarithromycin extended release.

Conclusion
• By providing susceptibilities for Hp on biopsy (rarely performed in practice), we present a well-documented example of the impact of crushing medication on treatment effectiveness.
• The case highlights the importance of addressing this commonly overlooked element of compliance, and of considering psychosocial reasons for crushing medication.

References