

## **Gastrointestinal Bleed as a Predictor of Stricture Formation after Acute Corrosive Ingestion**

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**Introduction :** Esophageal and gastric cicatrizations are the two major long term sequelae of corrosive ingestion and depend upon severity of mucosal injury. Severity of mucosal injury can be evaluated by endoscopic examination. However endoscopy is not always feasible and may not be available everywhere. Symptoms and signs are often not helpful in predicting severity of injury. **Aims and Objective :** To evaluate gastrointestinal bleeding (GIB) as a marker of severity of upper GI mucosal injury and a predictor of stricture formation after corrosive ingestion. **Methods :** A prospective study between July 2000 to December 2007 including 161 patients (29±17.9 yrs) with a history of corrosive intake. A detailed history regarding the nature and circumstance of the corrosive intake, any GIB was taken. After the initial stabilization, gastroduodenoscopy was done within 48hrs of corrosive intake and mucosal injuries were graded<sup>1</sup>. All received standard medical care and surgery was considered on the merit of the case. All blood transfusions were recorded. All patients underwent repeat evaluation at 6-8 weeks to look for cicatarization. Development of complications (stricture/perforation) was the endpoint of the study. **Results :** Of the 161 patients, 142 and 19 had taken acid and alkali respectively. Suicidal intention was present in 37(23%) of patients. The grade of corrosive injury was 2a in 16(9.9%), 2b in 69(42.9%), 3a in 47(29.2%) and 3b in 29(18%). History of GIB was elicitable in 124 (77%) patients (118(88.2%) - hematemesis and 46(11.8%) - malena). Of them 27(21.8%) required blood transfusion. Complications occurred in 131(81.4%) patients. Grade of mucosal injury (p=0.0), history of GIB (p = 0.00) and need for blood transfusion (p= 0.03) were significantly associated with future stricture formation. Occurrence of GIB was more common in patients with severe mucosal injury (p=0.002). Age (p= 0.28), sex (p=0.84), circumstances (p=1.0) of and type of corrosive intake (p=0.20) had no association with stricture formation. On multivariate analysis, grade of mucosal injury (p=0.00) and history of GIB (p=0.03) remained significantly associated with stricture formation. **Conclusion :** History of GIB following corrosive intake predicts complications independent of initial grade of mucosal injury and thus could help triage patients at centers where expertise for early endoscopy is not available. **Reference :** 1. Zargar SA, Kochhar R, Mehta SK. The role of fiberoptic endoscopy in the management of corrosive ingestion: need to modify endoscopic classification of burns. *Gastrointestinal endoscopy* 1991; 37: 242- 246.