

PP10

Corrosive poisoning, its clinical presentation, complications, and postmortem implications: A case series from a tertiary care hospital in Central India

Dr Namitha Shaji, Dr Hamsa CM, Dr Rajnish Joshi, Dr Saurabh Saigal, Dr Krishnakant Bhardwaj, Dr Atul S Keche, Dr Moirangthem Sangita, Dr Raghvendra Kumar Vidua

Department of Medicine, Critical Care and Forensic Medicine, All India Institute of Medical Sciences, Bhopal

Abstract:

Background: Corrosive poisoning and resultant gastrointestinal tract injuries are a source of considerable morbidity and mortality all over the world. Acidic corrosive substances induce acute coagulative necrosis, with a risk of perforation, while alkali substances result in liquefactive necrosis and tend to penetrate the deeper gastro-esophageal structures. The burden of corrosive poisoning is more in developing countries and in India, where corrosives are freely available at a measly price, corrosive poisoning has an estimated prevalence of 2.5-5% with 50 % morbidity and 13% mortality.

Aim and objectives: To evaluate clinical presentation, investigations, treatment, and outcome, along with postmortem findings of patients with Corrosive poisoning admitted in All India Institute of Medical Sciences (AIIMS), Bhopal.

Methodology: We identified patients who were admitted to our Centre, with features of corrosive poisoning, in between 2021 and 2022, by searching admission registers in medical intensive care unit. We performed a chart review of these patients. We also obtained available post-mortem records of the patients from the department of forensic medicine.

Results: A total of four cases of corrosive substance ingestion were admitted in our hospital, between January 2021 and December 2022. The age of patients ranged from 18 to 45 years, and three of them were women.



All the patients presented with severe abdominal pain, hematemesis, and dysphagia. All the patients developed metabolic acidosis and acute kidney injury. Patients were given intravenous fluids and total parenteral nutrition. Upper gastrointestinal endoscopy was done for 2 of the patients which demonstrated esophageal and gastric injury, and feeding jejunostomy was done for both. 2 among the 4 patients died and both had features of peritonitis as well as mediastinitis. Total survival was between 2 and 4 days after corrosive ingestion. Postmortem findings of available cases were compatible with clinical presentation.

Conclusions: Corrosive poisoning is one of the most debilitating conditions encountered in the field of toxicology. Urgent esophagogastroduodenoscopy and appropriate nutrition are of utmost importance in such cases. Corrosive poisoning remains a serious socio-medical issue, in view of the extended hospitalization, expensive diagnostic protocol, and possible permanent disability.