

**Evaluation of some Predictors of the  
Outcome of Patients with Corrosive  
Ingestion in the Poison Control Center,  
Ain Shams University Hospitals**  
(A Prospective study)

**Thesis**

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## List of Abbreviation

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Abbreviation	Meaning
°C	Degree Celsius
ABG	Arterial blood gases
ASGE	American Society of Gastrointestinal Endoscopy
CBC	Complete blood count
CNS	Central nervous system
CSI	Caustic substance ingestion
CT	Computed tomography
CVS	Cardiovascular system
DIC	Disseminated intravascular coagulation
DS	DROOL Score
EDTA	Ethylenediaminetetraacetic acid
EGD	Esophagogastroduodenoscopy
ES	Esophageal stricture
EUS	Endoscopic ultrasound
GI	Gastrointestinal
GIT	Gastrointestinal tract
HCl	Hydrochloric acid
HCO <sub>3</sub>	Bicarbonate

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Abbreviation	Meaning
HFO	History of exposure
ICU	Intensive care unit
ISSs	Initial symptoms and signs
IV	Intravenous
KOH	Potassium hydroxide
LES	Lower esophageal sphincter
mEq/L	Milliequivalent / Liter
Min	Minutes
mg/kg	Milligram / kilogram
mm <sup>3</sup>	Cubic millimetre
mmHg	Millimeter mercury
NaOH	Sodium hydroxide
NPO	Nothing per oral
NS	Non-significant
P	Probability
PA	Posteroanterior
PCC	Poison Control Center
PCCA	Poison Control Center of Ain Shams University Hospital
PCO <sub>2</sub>	Partial carbon dioxide pressure
PO <sub>2</sub>	Partial oxygen pressure

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Abbreviation	Meaning
PPIs	Proton pump inhibitors
ROC	Receiver operating characteristic
S	Significant
S/S	Signs and symptoms
SD	Standard deviation
TAR	Titrateable acid or alkali reserve
TLC	Total leucocytic count
TPN	Total parental nutrition

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## Introduction

Corrosives are a group of chemicals that have the ability to cause tissue injury by chemical reactions. They mostly affect the gastrointestinal tract (GIT), respiratory system, skin and eyes. The main types of corrosives are: acids and alkalis (*Raghu and Vadivelan, 2012*).

Data from the American authors showed that the rate of exposure to corrosive agents was 200,000 cases per year (*Spiric and Spiric, 2012*). In Egypt about 1/3 of household poisoning in children was due to corrosive substance (*Khalifa and Sayed, 2015*).

Exposure to corrosive agents accounts for a large number of accidental and intentional poisoning and continues to be a toxicological emergency in both children and adults. Eighty percent of corrosive poisoning occurs in children below five years within an estimated morbidity above 50% and the mortality of 13%. Adult exposure has more morbidity and mortality due to significant volume of exposure (*Raghu and Vadivelan, 2012*).

Corrosive ingestion may result in severe acute complications as upper gastrointestinal tract injury or long-lasting delayed complication or even death (*Havanond and Havanond, 2007*). Esophageal stricture is a major complication following caustic substance ingestion and it nearly develops in 7-15% of the patients (*Ugyun et al., 2012*). Other published data revealed that the incidence of esophageal stricture is about 50 % *of* the total cases following caustic substance ingestion (*Riffat and Cheng, 2009*).