

Formalin Poisoning – A Case Report

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Abstract

Formalin is a chemical which belongs to group of poisons that are capable of producing sudden deaths when swallowed. The ingestion of formalin causes disorder in the oral cavity, the gastrointestinal tract, liver, kidney, lung, heart and central nervous system in the early phase of reaction.

Case Report: We present a case of a 25 year old female who committed suicide by consuming formalin. She succumbed after three days as a result of chemical peritonitis.

Discussion: Formalin is an aqueous solution containing not less than 37 percent formaldehyde by weight with small amount of methanol or ethanol or both. Ingestion of formalin leads to coagulative necrosis of the oesophagus, and particularly the stomach, to produce tanned leather like appearance of mucosal surfaces. The introduction of formalin into the stomach is followed by the production of a gastritis which varies greatly in character. The duodenum and upper jejunum may also be involved in the inflammatory process. Formalin in whatever way introduced into the body is absorbed, and is then capable of producing lesions in the parenchymatous organs. Animals subjected to chronic poisoning with formalin administered by intraperitoneal injection develop fibrinous peritonitis, associated with marked eosinophilia. The changes in the kidneys and liver consist of cloudy swelling, fatty degeneration, focal necrosis and leucocytic infiltration.

Conclusions: The prognosis and post-mortem features are important and needs to kept in mind while dealing with such cases.