## 93.00

## SEVER ESOPHAGEAL DAMAGE DUE TO BUTTON BATTERY INGESTION - CAN IT BE PREVENTED?

D. Yardeni<sup>1</sup>, **H. Yardeni<sup>2</sup>**, A.G.C. Coran<sup>3</sup>, E.S. Golladay<sup>3</sup>

<sup>1</sup>Department Of Pediatric Surgery, Ha'emek Hospital, Afula <sup>2</sup>Regional Dierectory of Pediatrics, Maccabi Health Service, Morth Zone, Israel <sup>3</sup>C.S. Mott Children Hospital, University of Michigan Medical School, Ann Arbor, USA danhadar@012.net.il

Abstract

Background: Batteries represent less than 2% of foreign bodies ingested by children, but in the last 2 decades, the frequency has continuously increased. Most ingestions have an uneventful course, but those that lodge in the esophagus can lead to serious complications and even death.

Methods: Medline was searched in the English medical literature combining button battery and esophageal burn as key words. Cases were studied for type, size and source of the batteries, duration and location of the battery impaction in the esophagus, symptoms, damage caused by the battery and the outcome.

Results: Nineteen cases of esophageal damage were reported since 1979. Batteries less than 15mm diameter almost never lodge in the esophagus. Only 3% of button batteries are greater then 20-mm but are responsible for the severe esophageal injuries in this series.

Conclusions: These data suggest that manufacturers should replace large size batteries with smaller ones, and thus eliminate most of the complications. When the battery remains in the esophagus, endoscopic examination and removal done urgently will assess the damage to the esophagus and tailor treatment accordingly. There is a need for more public education about the dangers of battery ingestion, which should enhance "child proofing" of the home.