Battery Ingestions Have Devastating Complications
20-mm lithium batteries should be secured; if swallowed, removal must be prompt, authors say

MONDAY, May 24 (HealthDay News) -- The increased use of 20-mm lithium button batteries has led to a rise in devastating complications from their ingestion. Prevention should be encouraged through education and secure household product design, and, when prevention doesn't work, the removal of batteries from the esophagus must be expedited to prevent major complications, according to two studies published online May 24 in *Pediatrics*.

Toby Litovitz, M.D., of the National Capital Poison Center in Washington, D.C., and colleagues analyzed 8,648 battery ingestions to explore ingestion scenarios and formulate preventive strategies. They found that batteries ingested by children younger than 6 were most often obtained directly from a product, were loose, or obtained from battery packaging (61.8, 29.8, and 8.2 percent, respectively). In addition, of children who ingested the 20-mm lithium cell -- the most hazardous battery -- 37.3 percent were intended for remote controls. They conclude that parents and child care providers be taught to prevent battery ingestions, and that manufacturers should secure battery compartments.

In another study, Litovitz and colleagues analyzed three sources of data to identify battery ingestion outcome trends and predictors, define the urgency of intervention, and refine treatment guidelines. They found a 6.7-fold increase in the percentage of button battery ingestions resulting in major or fatal outcomes from 1985 to 2009, and an increase from 1 to 18 percent in...
the ingestion of 20- to 25-mm diameter cells from 1990 to 2008, which paralleled the rise in lithium cell ingestions (1.3 to 24 percent). Most fatal or major ingestions had no witnesses, and at least 27 percent of major outcomes and 54 percent of fatal outcomes were misdiagnosed.

"Revised treatment guidelines promote expedited removal from the esophagus, increase vigilance for delayed complications, and identify patients who require urgent radiographs," Litovitz and colleagues conclude.