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88. Pediatric laundry detergent pod exposures: Report from the Toxicology Investigator 's Consortium (Toxic registry)

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Background: In 2010 laundry detergent pods (LDPs) were introduced into the US market. Since that time, the incidence of LDP exposures in young children reported to poison centers continues to increase. Symptoms after ingestion range from mild GI upset to corrosive injury, as well as including cardiovascular and neurologic compromise. It is not clear why certain cases develop obtundation and coma while others manifest only aerodigestive tract injuries. We sought to evaluate the cases reported to the Toxic registry to further elucidate the variability in these presentations.

Methods: We accessed the Toxic registry for cases in which “Detergent Pod” was identified as a Primary Agent of exposure. Upper level data was reviewed for demographics, circumstances of exposure, clinical manifestations, treatment, and outcome.

Results: From 2010-present (April 2014) there were 50 cases, 62% male, with 68% under 2 years of age and only 2 cases over 6 years old. 96% were unintentional exposures. 84% of cases (n = 42) had signs or symptoms reported which included: Coma/CNS depression (38%), aspiration pneumonia (14%), respiratory depression (n = 5), metabolic acidosis (n = 3) and corrosive injury (n = 1). 16% of cases listed intubation and/or ventilator management as a treatment. There were no deaths reported.

Conclusion: Since the introduction of LDPs there have been unexpectedly severe clinical consequences in some patients after ingestion. It is not clear what the contents of the pods are which bring about symptoms such as coma and metabolic acidosis. However, this study and other case series demonstrate that these effects do occur with some frequency. LDP exposures can have unexpectedly severe consequences including coma, respiratory depression, and acidosis, and require ventilator support in a significant proportion of cases. Efforts towards responsible packaging if not removal of these products from the market are worthwhile to prevent these cases from occurring in young children. Meanwhile the clinician should be alert to the possibility of significant morbidity in these cases.