



To: Physicians, Nurses, and Other Health Care Providers in the Federated States of Micronesia
From: Ron Kirschner, MD, Medical Director, Nebraska Regional Poison Center
Subject: Oral agents for diabetes - Sulfonylureas
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- Sulfonylureas are oral diabetes medications that stimulate increased insulin release from the pancreas.
- When ingested by a non-diabetic sulfonylureas frequently cause hypoglycemia.
- Hypoglycemia usually occurs within 8 hours, but is sometimes delayed up to 16 hours.
- Small children are particularly at risk during the overnight period when they are fasting and not being observed.
- Children or non-diabetic adults who accidentally ingest someone else's sulfonylurea should be observed in the hospital for serial glucose checks every 1-2 hours.
- Intravenous access should be obtained but prophylactic IV dextrose is not recommended as this may delay the onset of hypoglycemia and stimulate further insulin release.
 - Patients should be given free access to a normal diet.
- If hypoglycemia occurs, a dextrose bolus should be given followed by an infusion of 10-20% dextrose.
 - For adults and older children the bolus can be given as D50 1-2 mL/kg; children age \leq 5 years should be given D25 2-4 mL/kg over 1-2 min, and glucose should continue to be monitored.
 - Once the patient has been euglycemic for 24 h, glucose can be monitored off IV dextrose.
- If the patient becomes hypoglycemic, octreotide can be given to inhibit further pancreatic insulin release.
 - The usual dose is 1-1.5 mcg/kg SQ q 6 hours (children) or 50 mcg/kg q 6 h for adults.
 - After unintentional sulfonylurea ingestion patients often need between 1 and 4 doses but this is variable and should be guided by continued glucose checks.

- Patients who are euglycemic should be observed in the hospital for a minimum of 8 hours after IV dextrose and octreotide (if given) have been discontinued.

References

Dougherty PP *et al.* Evaluation of octreotide for sulfonylurea overdose. *Pediatr Emerg Care* 2013; 29: 292.

Glatstein M *et al.* Octreotide for treatment of sulfonylurea poisoning. *Clin Toxicol* 2012; 50: 795.

Levine M *et al.* Hypoglycemia after accidental sulfonylurea ingestions. *Pediatr Emerg Care* 2011; 27: 846.

Lung DD, Olson KR. Hypoglycemia in pediatric sulfonyurea poisoning. *Pediatrics* 2011; 127: e1558.

Our trained staff of nurse specialists in poison information and physician toxicologists is available 24 hours a day to answer your questions. In the Federated States of Micronesia, health care professionals and the public can reach the Poison Center by calling 288, wait for an automated operator, then 888-222-451