

Poison HOTLINE

1-800-222-1222

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Did you know

Pharmacobezoars are concretions of medications or the medication carrier (e.g. the coating of some sustained release tablets) within the digestive tract.

Bezoars can cause the medicine to be slowly released thereby leading to continued or delayed absorption, prolonged toxicity, and persistent elevation or fluctuation of drug levels. Bezoars may also break apart causing a sudden and rapid increase in drug levels.

The most common medications associated with bezoars include enteric coated aspirin, barbiturates, iron, glutethimide, meprobamate, and sustained release (SR) products including potassium, theophylline, venlafaxine and verapamil.



Salicylate Poisoning & Treatment

Salicylate toxicity occurring from the ingestion of aspirin and aspirin-containing medications are common. There are many products which contain aspirin and aspirin derivatives. Common products include Excedrin, Pepto-Bismol, and arthritis creams with methyl salicylate.

The toxic amount in an acute ingestion is 150 mg/kg of aspirin or a total of 6.5 grams of aspirin. Oil of Wintergreen contains methyl salicylate and is a very concentrated form of aspirin. It takes only a small amount of Oil of Wintergreen to be toxic. For a patient who is chronically on a salicylate, an acute overdose can be more dangerous as the CNS is already saturated with the salicylate.

Salicylates cause death from its direct effect on the CNS – cerebral edema, cerebral hypoglycemia and interference with the energy production at the cellular level. Serum blood sugar can be normal despite there being cerebral hypoglycemia. Aspirin toxicity can also cause fever from the disruption of ATP production. A wide variety of neurological symptoms can be seen from the toxic effects of salicylate on the brain.

Symptoms of an acute overdose include N/V, tachypnea, fever, tinnitus or other hearing changes, and metabolic acidosis. With more severe toxicity, symptoms can include worsening metabolic acidosis, coagulopathy, cerebral edema, arrhythmias, encephalopathy, seizures, coma, pulmonary edema, and death.

Obtain salicylate levels every 2 hours until they are consistently falling and below 35 mg/dL Aspirin can form bezoars and absorption can fluctuate. Enteric coated aspirin will also cause a slower absorption.

Treatment includes <u>serum</u> and urine alkalinization with sodium bicarbonate. Serum alkalinization helps prevent the movement of the salicylate into the CNS because increasing acidosis accelerates the movement of salicylate into the CNS. Some indications for alkalinization include tinnitus or muffled hearing, an aspirin level of 35 mg/dl or greater, altered mental status, or persistent metabolic acidosis. Dialysis is recommended with severe aspirin toxicity or worsening neurological issues.

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