When acetaminophen use becomes toxic. Treating acute accidental and intentional overdose.

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Whether accidental or intentional, acetaminophen poisoning is not uncommon; in fact, it is the most common drug-induced cause of liver failure. When hepatic glutathione is depleted, the toxic metabolite NAPQI fails to be conjugated and causes hepatic injury. At risk are chronic alcoholics, binge drinkers, patients taking medications that induce the P-450 isoenzyme system, and those with concomitant liver disease. The four phases that make up the clinical course of acetaminophen poisoning distinguish signs, symptoms, and laboratory values according to severity. In diagnosing acetaminophen toxicity, adequate history taking and serial measurements of acetaminophen level are essential. Treatment is rooted in three goals: decreasing the absorption of acetaminophen using activated charcoal, replacing hepatic glutathione using acetylcysteine, and supportive care in the case of hepatic failure. The prognosis depends on the amount ingested and the time of presentation after ingestion.