

Late Extensive Intravenous Administration of N-Acetylcysteine Can Reverse Hepatic Failure in Acetaminophen Overdose

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Objective : Acetaminophen is a commonly used analgesic and has been shown to be a main cause of drug induced liver failure (1). N-acetylcysteine (NAC) should be employed as the antidote in case of acetaminophen poisoning within the first 8- 10 hours (2). Oral administration of NAC is universally recommended and due to the adverse effects, the intravenous administration of the agent is reserved for patients with oral intolerance and severe complications (3). **Case report :** We here report an 18-year old man with severe liver failure due to a huge ingestion of acetaminophen who was taken into the Loghman Hakim Hospital Poison Center 72 hours after attempted suicide. Regarding the poor prognostic clues as his level of consciousness and impaired liver functions, an extensive intravenous regimen of NAC was started. The patient survived the condition with an additional intravenous administration of NAC past the first 72 hours of treatment.

Conclusion : We discuss that even in late phases of intoxication; high- dose intravenous NAC can serve a substantial improvement. **Reference :** 1. Larson AM, Polson J, Fontana RJ, Davern TJ, Lalani E, Hynan LS, Reisch JS, Schiodt FV, Ostapowicz G, Shakil AO, Lee WM. Acetaminophen-induced acute liver failure: results of a United States multicenter, prospective study. *Hepatology* 2005; 42: 1364-72. 2. Larson AM. Acetaminophen hepatotoxicity. *Clin Liver Dis* 2007 11: 525- 48, vi. 3. Jalali N, Pajoumand A, Abdollahi M, Shadnia S. Epidemiological Survey of poisoning mortality in Tehran during 1997- 1998. *Toxicol Lett* 2000; 116 (Suppl 1): 84.