NZPSU Study on Supratherapeutic Paracetamol Ingestion in Children

Commencing January 2014

Background

Inappropriate paracetamol use is a leading cause of calls to poisons information centres. Between 2009 and 2012 the New Zealand National Poisons Centre received an average of over 800 calls annually relating to child paracetamol ingestion. In children, paracetamol overdose from deliberate self-poisoning, accidental exposure or inadvertent therapeutic misadventure can lead to hepatotoxicity, which may result in acute liver failure and occasional death. In North America and the United Kingdom, acute intentional overdose is the most common cause of acute liver failure in childhood, accounting for 14% of all cases with 4% mortality. In New Zealand, the nature of ingestion, risk factors and outcomes of paracetamol-associated acute liver failure have not previously been described.

Although the number of children progressing to liver failure can be currently identified from the National Paediatric Liver Transplant Unit database, the number of children requiring hospital admission and/or developing reversible liver damage not requiring tertiary care has not been described. This NZPSU study will provide valuable information on this.

Case Definition

Any child aged ≤15 years admitted to a hospital ward or Emergency Department Short Stay Ward/facility with suspected or proven supratherapeutic ingestion of paracetamol. This includes single or repeated:

- Unintentional ingestion
 - including supratherapeutic dosing at home or in hospital
- Intentional overdose

... and all treated with N-Acetyl cysteine

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