Detecting harm following paracetamol overdose | Signal

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Type Signal
This Signal is about reducing the risk of harm to patients who have taken an overdose of paracetamol.

A sample incident reads:

“Patient had attended the emergency department following an accidental overdose of paracetamol, had investigations and discharged home. Patient attended again three days later complaining of pains to lower back and legs. She was seen by medical staff and discharged home. She returned acutely unwell the following day, presented into resus where her condition deteriorated further and she died at 01:25.”

In the United Kingdom paracetamol overdose results in more than 70,000 emergency department attendances every year. The severity of paracetamol toxicity depends on the dose and whether appropriate treatment is received on time. A single overdose of 20 to 30 standard tablets can result in liver damage and death if not treated promptly. The threshold may be lower in a person who is an alcoholic, seriously undernourished or takes certain medicines.

A search of the National Reporting and Learning System (NRLS) revealed 28 serious incidents, in which the treatment of a patient with a paracetamol overdose was delayed or inadequate. Four of these incidents resulted in a patient death.

Underlying causes included:

- patient complained of general symptoms such as vomiting and decreased appetite and a paracetamol overdose was not suspected;
- patient presented with paracetamol overdose but no plasma paracetamol level had been taken;
- blood tests were performed that indicated impending liver failure but no treatment was commenced;
- patient received incorrect dose of acetylcysteine following paracetamol overdose.

In cases where paracetamol overdose is implied or suspected patients should receive immediate medical attention at hospital. This should include those who appear asymptomatic. Guidelines for the management of acute paracetamol overdose can be found in the British National Formulary overdose section (free subscription).

Please contact us with your initiatives to reduce risk in this area.

signals are notifications of key risks emerging from review of serious incidents reported to the NRLS and shared by the NPSA.