

Multi-centre implementation of the SNAP protocol for paracetamol overdose – reducing the length of stay

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Aim/Objective/Background:

Paracetamol stands as one of the most prevalent drugs of overdose in the UK. The conventional treatment for Paracetamol toxicity involves intravenous administration of N-acetylcysteine (NAC), typically administered over 21 hours in UK hospitals. However, an alternative 12-hour infusion, known as the 'SNAP' regimen, has shown promise in reducing anaphylactoid reactions compared to the standard treatment. This study implemented the SNAP regimen in two District General Hospital Emergency Departments within the same NHS Trust as part of a quality improvement project (QIP), aiming to assess its impact on reducing adverse reactions and inpatient length of stay.

Methods/Design:

Trust guidelines were revised to recommend the 12-hour SNAP regimen for adult Paracetamol overdose cases, accompanied by a pre-filled prescription chart. A retrospective analysis of patient records and electronic discharge letters was conducted before and after the guideline change to identify NAC recipients and document any adverse reactions. Length of inpatient stay was also documented.

Results/Conclusions:

Over a three-month period from August to November 2020 across both sites, 60 adult patients received NAC for Paracetamol overdose, with four experiencing anaphylactoid reactions. Following the introduction of the SNAP regimen, spanning from April to June 2021, 36 adult patients received NAC, none of whom experienced adverse drug reactions. Before the guideline change, adult patients admitted for Paracetamol overdose had an average inpatient stay of 48.3 hours, which decreased to an average of 44.5 hours following the adoption of the SNAP regimen. The SNAP NAC regimen demonstrated comparable safety regarding adverse drug reactions while effectively reducing the length of inpatient stay for adults with Paracetamol overdose.