

Evidence-Based Practice (EBP) - E153

Poster

Abstract Title:

Acetaminophen Usage Among Trauma Patients: A Patient Safety Initiative

Authors:

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Background & Purpose:

The usage of intravenous acetaminophen has greatly expanded in the acute setting since it's approval by the FDA in the fall of 2010. This increased usage has the inherent risk for patients to receive levels of acetaminophen which surpass the recommended guidelines. In April 2013, we discovered that multiple trauma patients had received greater than FDA recommended doses of acetaminophen. Therefore, we sought to evaluate the scope of the problem and improve the safe usage of acetaminophen and acetaminophen combination medications in our facility.

Study/Project Design:

A retrospective review of patients' charts who were prescribed IV acetaminophen from January through June 2013.

Setting:

An urban academic medical center with 404 beds and the regions only Level 1 Trauma Center.

Sample:

Patients admitted to the trauma service line between January and June 2013, whom were prescribed IV acetaminophen.

Procedures:

A retrospective review of trauma patients that were prescribed IV acetaminophen was performed. Evaluation of the total amount each patient received of acetaminophen, intravenous and oral, in a 24 hour period was reviewed. This review included medications which contained combinations of acetaminophen and other medications.

Findings/Results:

86 patients were identified as having the potential to receive more than 4g/24 hours, of which 15 did receive more than the recommended dosage. Two patients received greater than 4g/24 hours on two separate instances for a total of 17 incidences in the review period. In addition, we found orders for IV acetaminophen to be given IV push.

Discussion/Conclusions/Implications:

During the review process, several areas of concern were identified. Findings included: lack of intuitive clinical decision support, electronic medication administration record (eMAR) limitations, lack of awareness among providers of current medications containing acetaminophen that patients were taking and failure of nursing to follow the five rights of medication administration. New care protocols have been developed for our trauma population and throughout our institution. Our hospital findings have also lead to dialogue throughout our affiliate hospitals regarding IV acetaminophen usage.