



Can Septic Hip Decision Rule Help Evaluate Suspected Pediatric Musculoskeletal Infection?

A retrospective study of children examined in an emergency department (ED) for suspected musculoskeletal (MSK) infection was performed over a 2-year study period to evaluate the performance of a septic hip clinical decision rule (CDR). Predictors from the CDR were compared to data from the medical records. The results of the analysis showed that the septic hip CDR had a low predictive probability when zero or one predictor was present and a moderate predictive probability with all 5 predictors in the CDR were present. The best performing predictors were found to be: fever; refusal to bear weight or pseudoparalysis, and C-reactive protein >2.0 mg/dL. These predictors should alert providers to consider pediatric MSK infections in addition to septic arthritis.

The THINK (Treatment of Headache with IntraNasal Ketamine) Trial

Headache is a common chief complaint in the ED. In this study, a convenience sample of adult patients with primary headache was enrolled in a randomized, single-blind, placebo-controlled trial. Analgesia with intravenous (IV) metoclopramide and diphenhydramine was compared to analgesia with intranasal (IN) ketamine. The results showed that the mean change in pain visual analogue scale (VAS) at 30 minutes post-intervention was 22.2 mm in the control arm vs. 29.0 in the IN ketamine arm (mean effect size difference of 6.8 mm). Emergency physicians can consider intranasal ketamine as an effective analgesic that does not require venous access in ED patients with primary headache.

A New Paradigm Shift in Acute Ischemic Stroke Therapy

In the past 3 years there have been several major studies published on the use of endovascular therapy (EVT) for large vessel occlusion acute ischemic stroke. This narrative review discusses recent randomized controlled trials evaluating EVT and its effect on acute ischemic stroke management. EVT technology has become more efficient, minimizing complications and improving the efficacy of EVT. Several viable interventions are reported for a small subgroup of patients with ischemic stroke, up to 24 hours after symptom onset, that can significantly improve patient outcomes.

Ocular Compartment Syndrome and Lateral Canthotomy Procedure

Ocular compartment syndrome is an ophthalmological emergency that can present with subtle signs including increased intraocular pressure. Ocular compartment syndrome can lead to irreversible loss of vision if not treated with

a simple bedside operation called a lateral canthotomy and cantholysis within a specific time frame. This article explores the pathophysiology and presentation of ocular compartment syndrome and describes how to perform the lateral canthotomy and cantholysis procedure.

Esmolol vs. Amiodarone to Treat Recent-onset Atrial Fibrillation

Recent-onset atrial fibrillation is the supraventricular dysrhythmia most frequently managed in the ED. This external validity study was conducted to compare the short-term efficacy of esmolol with that of amiodarone to treat recent-onset atrial fibrillation. A retrospective survey utilizing a blind matching procedure was carried out in mobile intensive care units by analyzing patient records dated between 2002 and 2013. Esmolol was found to be superior to amiodarone for short-term efficacy in the context of emergency medicine. It is concluded that in real-life, esmolol is quick, efficient, and safe. It should be considered a primary intention anti-dysrhythmic agent for the acute management of recent-onset atrial fibrillation.

Intranasal Sufentanil vs. Intravenous Morphine for Acute Pain

Patients often seek medical attention in the ED to address their pain. Sufentanil is an attractive agent for management of acute pain in the ED. A prospective, randomized, double-blind, double dummy controlled trial evaluated the use of intranasal (IN) sufentanil ($0.7 \mu\text{g}/\text{kg}$) vs. intravenous (IV) morphine ($0.1 \text{ mg}/\text{kg}$) in adults who presented to the ED with acute pain. The results showed that IN sufentanil resulted in rapid and safe analgesia with comparable efficacy to IV morphine, for up to 30 min in patients who presented to the ED with acute pain. The intranasal route provides a safe, effective, and painless alternative method of drug administration.

Impact of Conversion from Urgent Care Center to Freestanding ED

The aim of this study was to determine whether there was any change in patient population, conditions managed, or reimbursement among 3 facilities that converted from urgent care center to freestanding emergency department. Using insurance claims, the outcomes of interest were compared for one year before and after conversion. The results demonstrated that following conversion, patient volume decreased and reimbursement per visit increased, despite no change in patient characteristics and little change in conditions managed.