Repeat IV Ketamine Dosing for Pediatric Procedural Sedation

Children undergoing procedural sedation often receive repeat doses of Ketamine to maintain dissociation. This was a retrospective study of pediatric patients 1-18 years of age undergoing procedural sedation with intravenous (IV) Ketamine. There were 419 children included in the analysis, with a mean sedation time of 33 min. Most patients (86.6%) received at least one repeat dose of Ketamine to maintain sedation. Children under 3 years of age received the highest hourly dose (in mg/kg/h) of Ketamine compared to older age groups.

Comparison of Central Venous Access with Accelerated vs. Modified Seldinger Technique

Venous access is important in the care of critically ill patients, and the speed and efficiency of access can greatly impact patient care. This study's aim was to evaluate whether the use of combination central line devices and the accelerated Seldinger technique would reduce the time required to place a central venous catheter (CVC) compared to the modified Seldinger technique with standard CVC kit commonly used in the emergency department (ED). This 2-arm randomized crossover study was performed in a simulation setting. The results of the study showed that the accelerated Seldinger technique with a combination CVC device was significantly faster in the time required for achieving central venous access than the modified Seldinger technique with a standard CVC kit. The procedure time was reduced by 35% and the ease of use time was increased by 7%.

Occult Infection and Sepsis Mimics in the Sick Patient

This review article addresses the evaluation of the acutely ill-appearing patient with no apparent source of infection, focusing on occult sources of infection and conditions that mimic sepsis. The musculoskeletal, cardiac, neuroaxial, and abdominal systems should be considered as potential sources of sepsis. In-dwelling devices should be carefully examined for signs of infection. Sepsis mimics should be considered in patients who fail to respond to standard therapies for sepsis. A review of the patient's medical history, medications, and recent exposures can assist in identifying the source of the patient's infection. Many conditions that mimic sepsis cause significant mortality and are reversible if recognized in a timely manner.

Historical Perspective on Lateral Canthotomy

This review is an historical perspective piece that describes the history of the adoption of lateral canthotomy as an Emergency Medicine procedure. Lateral canthotomy is a procedure that was adopted by emergency physicians from the surgical literature. The article details the history of orbital compartment syndrome, and the evolution of its treatment to the present day. Given the time-sensitive nature and acuity of orbital compartment syndrome, lateral canthotomy was adopted for Emergency Medicine because it can be performed more quickly at the bedside.

Lung Ultrasound in the Diagnosis of Pneumonia, Acute Heart Failure, and Exacerbation of COPD/Asthma

Lung ultrasound can accelerate the diagnosis of life-threatening diseases in adults with respiratory symptoms. This is a systematic review of the accuracy of lung ultrasonography for the emergency diagnosis of pneumonia, acute heart failure, and exacerbation of chronic obstructive pulmonary disease (COPD)/asthma in adults. The review reveals that lung ultrasound is highly accurate in diagnosing these diseases. Lung ultrasound can be a valuable complement to other diagnostic methods for adult ED patients with respiratory symptoms.

Effect of an Electronic Health Record Intervention on Pending Laboratory Results at ED Discharge

Since the increase in reliance on the electronic health record (EHR), there have been many efforts to improve patient care through the EHR. Interventions to the EHR designed to improve patient care have had mixed results. This study evaluates the efficacy of a single EHR workflow intervention in the ED intended to reduce the number of laboratory tests resulting after patient discharge. An EHR alert requiring emergency physicians to review pending laboratory results at the time of ED discharge did not reduce the number of patients discharged with laboratory results pending; 92% of emergency physicians inaccurately indicated that all tests had been reviewed. EHR workflow interventions do not always accomplish their goals and should be considered carefully.