Clonidine Caudal Combined with Dexmedetomidine IV for Awake Incision and Drainage of Septic Knee in 1 Month Old

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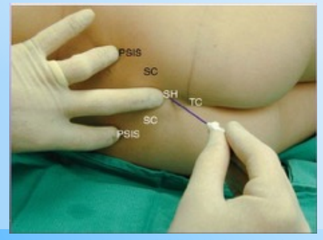
Introduction

- **Patient Presentation**: Full term, one month old female who presented to the emergency department with right leg pain found to have osteomyelitis of the right femur & septic arthritis of the right knee
- **Past Medical History**: No significant history, weight 4.55 kg
- **Hospital Course**: Admitted to inpatient & started on ampicillin

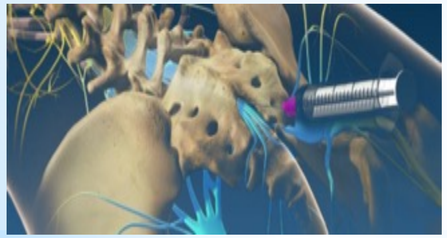
➢ Hospital Day 2: Taken to the OR for irrigation & debridement of right thigh/knee.

➢ Hospital Day 3: Pus was noted to be draining from the wound.

➢ Hospital Day 4: Plan for repeated incision and drainage of right knee



http://anaesthesiatoday.blogspot.com/2010/12/caudal-epidural-block-review.html



http://advancedpainmedical.com/our-services/caudal-epidural-steroid-injection/

Management

- **Preoperative Consultation**:

➢ Parents were opposed to repeated general anesthesia for procedure given the recent exposure for initial I&D.

➢ Following extensive discussion with family, surgical and anesthesia attendings, the decision was made to attempt regional neuraxial anesthesia with minimal intravenous sedation with general anesthesia as backup

- **Operative Course**: Patient brought to OR, all ASA standard monitors placed, in situ PIV. Throughout the procedure, the patient remained largely awake & comfortable. Vital signs remained stable.
  - Awake caudal with 4.5 mL bupivacaine with epinephrine and 4 mcg of clonidine injected
  - Sedation achieved with intravenous dexmedetomidine 2.5 mcg x2 and a pacifier with sweet-ease
- **Postoperative course**: Patient recovered in pediatric PACU and was transferred to PICU for postoperative monitoring.

➢ **Did not require opiates postoperatively**.

➢ Single dose of 70mg of oral Tylenol on POD1 for analgesia.

Discussion

- Highlights utility of a regional neuraxial anesthetic with minimal sedation in infants
- Demonstrates the probable safety and efficacy of combining neuraxial clonidine and intravenous dexmedetomidine for prolongation of caudal analgesia and intraoperative sedation respectively
- Formalized studies are required to further delineate the safety profile of the combination of neuraxial clonidine with intravenous dexmedetomidine
- The technique of an awake caudal with intravenous sedation should be considered for appropriate procedures in those pediatric patients for whom endotracheal

References

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