I. Overview of Osteogenesis Imperfecta (OI)
1. Current Classifications
2. Clinical manifestations
   - Fractures
     Myth or Fact
     - You can easily distinguish fractures caused by OI from those caused by child abuse
     - Baby OIs should always be carried on a pillow and discouraged from moving
     - pamidronate treatment will improve bone density and prevent bone fractures
   - Kyphoscoliosis, Vertebral anomalies
     Myth or Fact
     - Kyphoscoliosis can lead to respiratory compromise and cor pulmonale
   - Dentinogenesis imperfecta
     Myth or Fact
     - pamidronate treatment can also improve teeth brittleness in OI
   - Coagulopathy
     Myth or Fact
     - platelet dysfunction has been treated with DDAVP successfully in OI
     - the coagulopathy in OI is completely understood
   - Cardiac lesions
     Myth or Fact
     - only congenital anomalies are observed in this syndrome

II. Anesthetic Management of OI
1. Bone fragility
   Myth or Fact
   - parents often request no blood pressure cuff be used
   - blood pressure cuffs can be used without fractures in OI if used at a neonate pressure
2. Airway management
   Myth or Fact
   - cervical instability in OI can result in brain stem compression
   - laryngoscopy has resulted in fractures of the cervical spine and mandible
   - LMAs are not safe in OI
3. Pharmaceutical
- Succinylcholine
  *Myth or Fact*
  - can be used in OI as long as prefasculation doses of NDMR are given

- Propofol
  *Myth or Fact*
  - propofol has induced lactate acidosis in OI

4. Hyperpyrexia
  *Myth or Fact*
  - All hyperpyrexia in OI is malignant hyperthermia

5. Neuraxial regional blocks
  *Myth or Fact*
  - Caudal and epidural blocks are contraindicated in OI

**III. Pain Management**
1. Narcotic Tolerance

**IV. Unique issues of Fassier-Duval Rodding**

**V. References**
eMedicine Osteogenesis Imperfecta, Pediatric MedicineGenetics and Metabolic Disease, updated July 6, 2006, Plotkin H, UNMC

Textbooks
3. Anesthesia for infants and children; eds. Etsuro Motoyama and Peter Davis, p1222,738,1026

Articles