Anesthetic Considerations for Pregnant Patients with Osteogenesis Imperfecta

Valeryia Pratasava MD, William Liao MD, Nikhil Kasarla MD, Jeffrey Bernstein MD

Background

- Osteogenesis imperfecta is autosomal dominant disorder characterized by bone fragility
- Common phenotype is short stature, joint hypermobility, scoliosis and low-impact fractures
- Many women become pregnant but are at increased risk of obstetrical complications (pelvic fractures, hemorrhage, neonatal morbidity)
- Cesarean section is often indicated due to risks mentioned above





Zalewski, S. (n.d.). Osteogenesis imperfecta poses vision risks too. Michigan Medicine. https://www.michiganmedicine.org/health-lab/osteogenesisimperfecta-poses-vision-risks-too



Case Report

- 34 yo F G1PO at 38 weeks with OI (Type 5) and fetus with skeletal dysplasia.
- Physical exam: 3'4" height, 29 kg weight
- Labs within normal limits
- Combined spinal epidural was performed for a scheduled Cesarean section
- L4-L5 interspace, 17 gauge 3.5 in Touhy needle, LOR at 2.5 cm, catheter left at 7.5 cm.
- Spinal dose: 0.8 mL 0.75% bupivacaine 75 mcg duramorph
- Phenylephrine drip started at low dose



Extremely severe

lethal OI

Non-deforming OI with blue sclera

Pr

OI 3 Progressively deforming OI



normal sclera

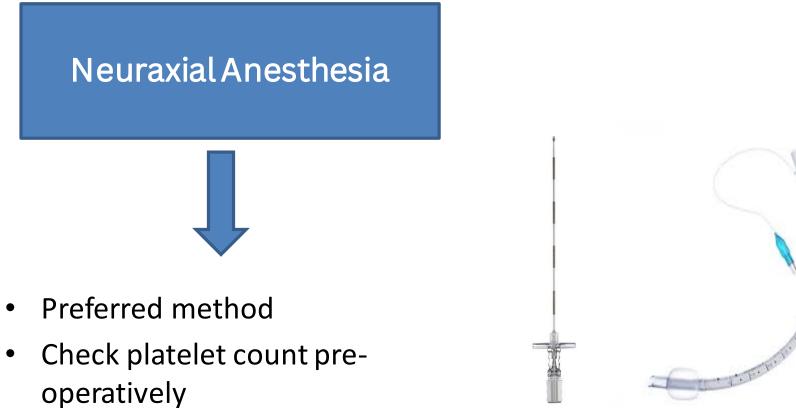
OI 4 Various OI with



OI 5 OI with abnormal ossification



Conclusions



Increased difficulty of epidural • placement with severe scoliosis

- mobility
- •
- laryngoscopy
- backup



• Always ready as back up Watch out for decreased neck

Risk of tooth dislodgement Cervical instability with direct

• Have videoscope available as

