

BACKGROUND

- Idiopathic multicentric osteolysis (IMO) is an extremely rare osteolytic bone disease with fewer than 60 cases reported in the literature.¹
- Missense mutation to MAFB, a small gene on chromosome 20q12.
- Presents in early childhood with pain and swelling to patients' wrists and ankles, often leading to the inability to walk secondary to pain.¹

OBJECTIVE

To improve the understanding of the IMO disease process and the perioperative considerations for analgesia regarding positioning and regional anesthesia.

CASE DESCRIPTION

A 19-year-old female with medical comorbidities including idiopathic multicentric osteolysis, scoliosis, renal disease, and peripheral neuropathy presented to our facility for a right knee resection secondary to auto-fusion in extension. The right knee extension limited her motorized wheelchair mobilization.

Prior perioperative complications:

- Difficult peripheral IV access
- Uncontrolled post-operative pain
- Prior regional anesthesia deferral due to ultrasound pressure

Physical Exam:

- Bilateral lower extremity paresthesias below knees
- Chronically dislocated left elbow
- Bilateral upper extremity anatomic deformity

Perioperative events:

- Extensive risk/benefits discussion, consented for a post-induction femoral nerve block with catheter placement
- Positioned for surgery while awake to assure optimal comfort and neutral alignment of joints
- Post-operatively remained comfortable with satisfactory analgesia

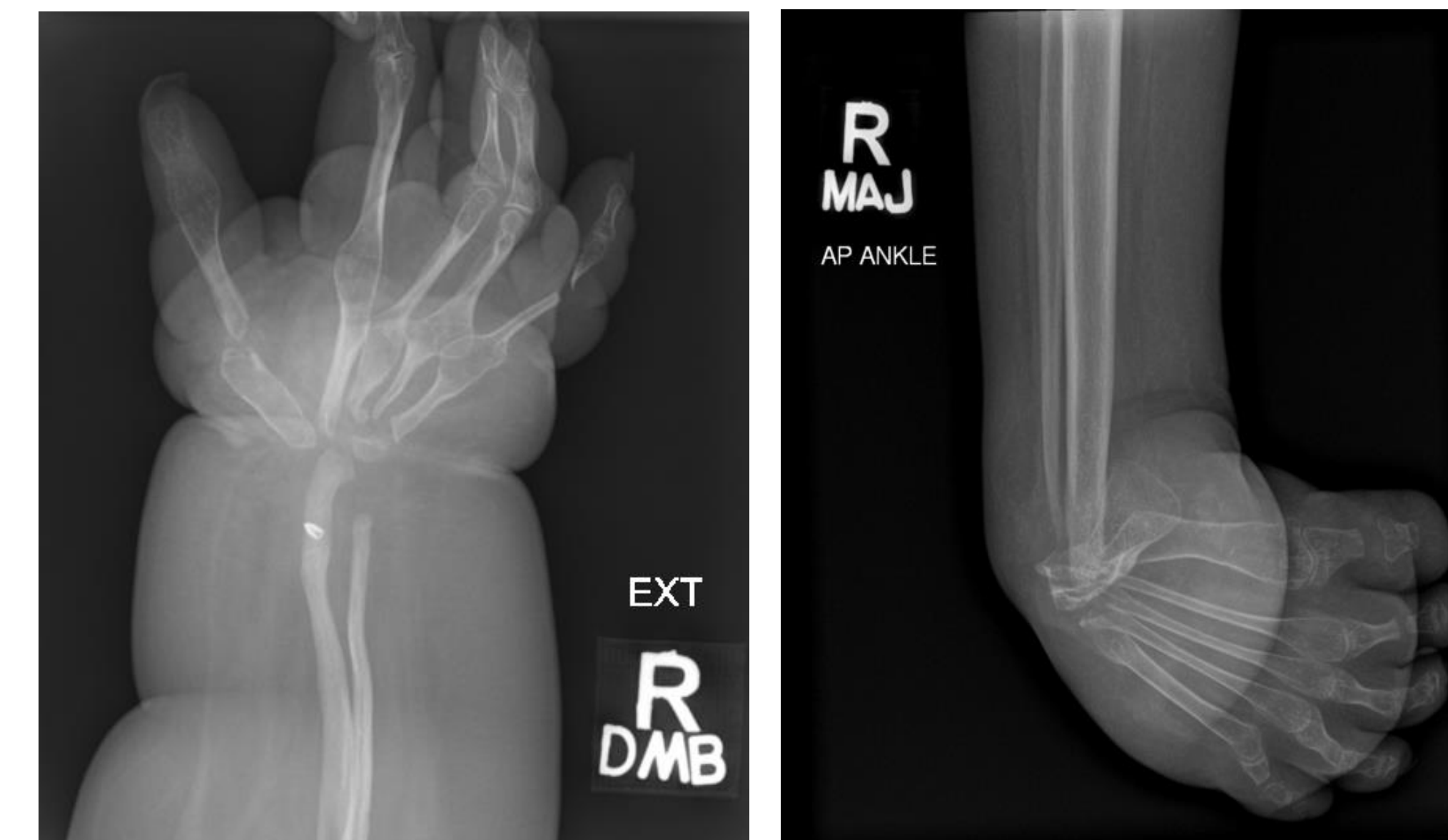


Figure 1. Right upper extremity and lower extremity x-ray demonstrating anatomic deformity

DISCUSSION

- Regional anesthesia on awake patients, allows for paresthesia or pain on injection feedback.²
- Regional anesthesia has been performed on pediatric patients under general anesthesia without an increase in complications.²
- Hypothesized this patient's risk of nerve injury undergoing femoral nerve block under general anesthesia was not increased compared to the awake state and would mitigate pain from the ultrasound transducer.

CONCLUSION

This case demonstrates successful femoral nerve blockade in a patient with IMO.

Underlying neurological mechanism for her chronic pain has not been clearly elucidated in the literature, we were able to optimize her surgical care and perioperative pain control by incorporating regional anesthesia into her pain management plan.