

INTRODUCTION

- Orthopedic fractures are common in elderly patients, especially with oncologic malignancies
- Pain management is challenging: comorbidities, risk of cognitive dysfunction, opioid tolerance with chronic pain
- We aimed to develop a protocol to standardize pain management of acute oncologic fracture patients, with regional anesthesia interventions as a primary component

METHODS

- Highlight two clinical cases that involved comprehensive perioperative care with regional anesthesia for oncologic extremity fractures

CASE REPORT - 1

- 79 year-old woman with RCC →femoral neck fracture
- Initial management with oral/IV opioids was unsuccessful and results in significant delirium
- Acute pain consulted → s/p PENG x 2 + LFCN block (Fig. 1)
- Opioid consumption decreased by 60% in preop and postop period compared initial presentation

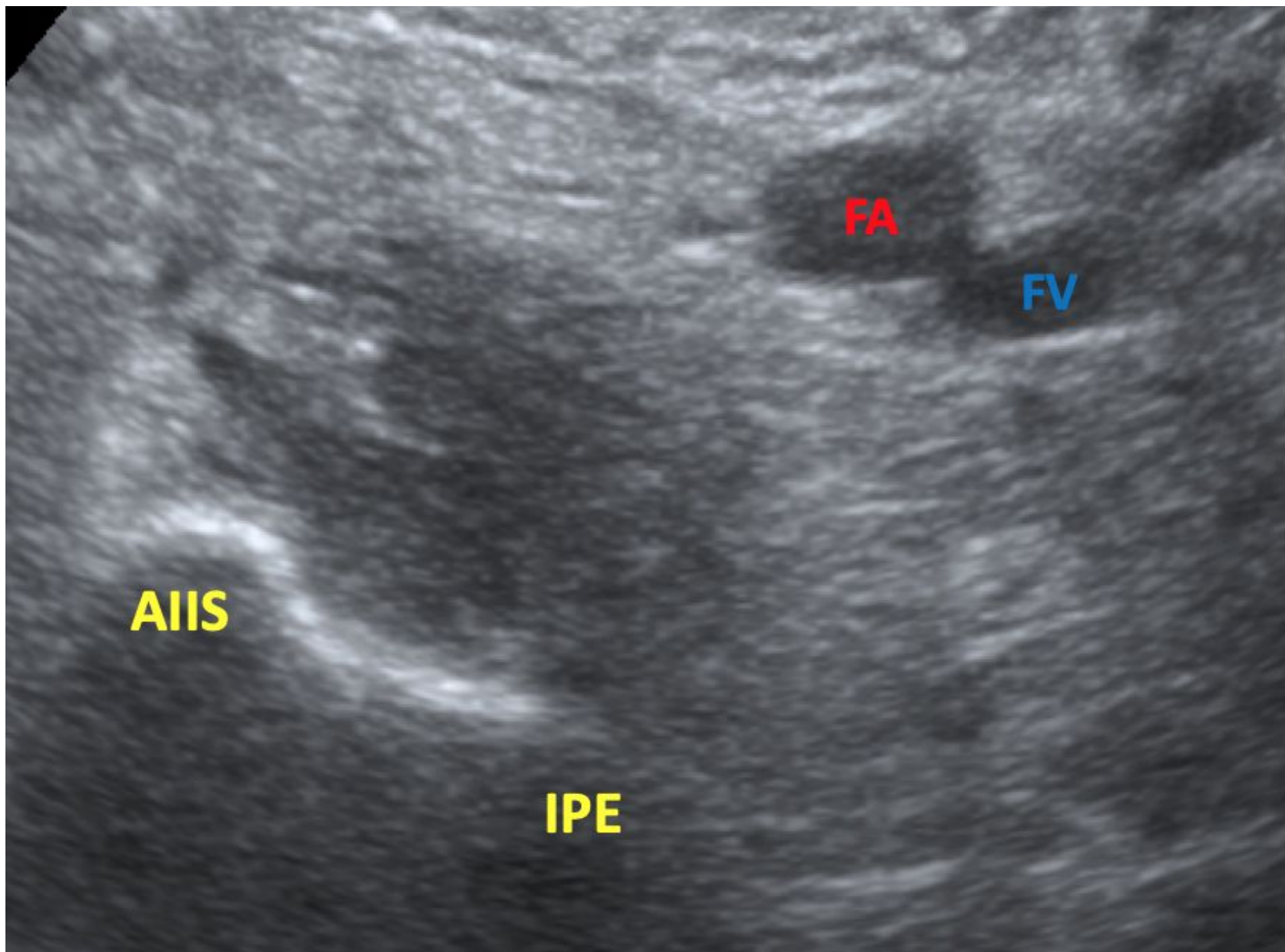
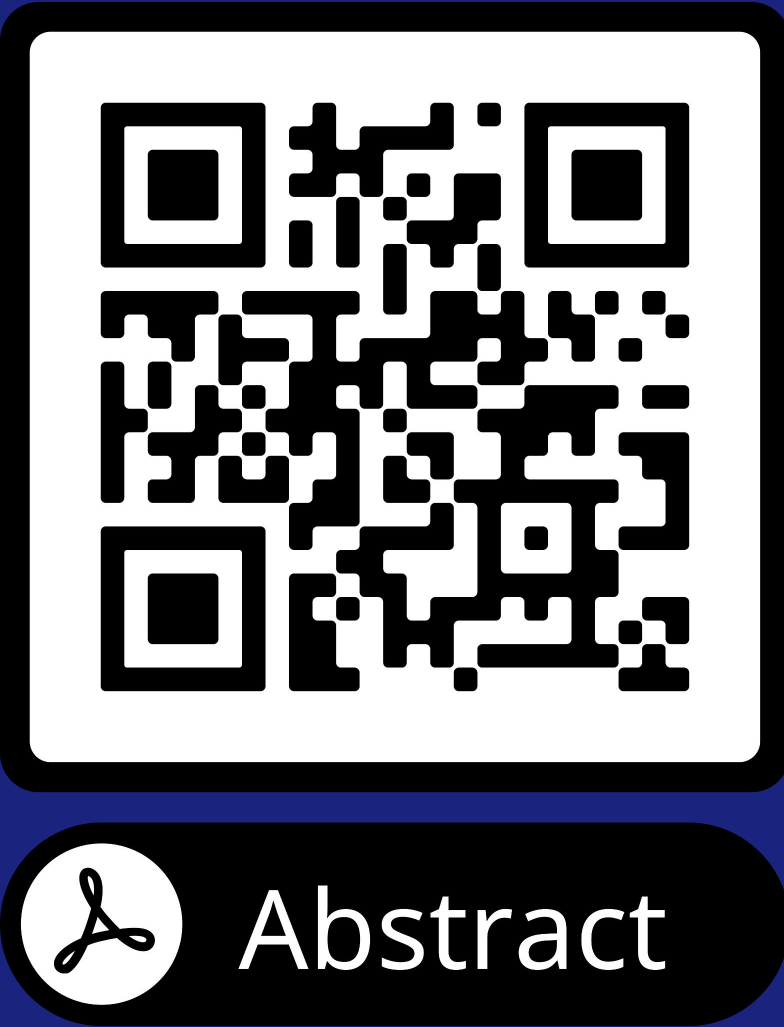
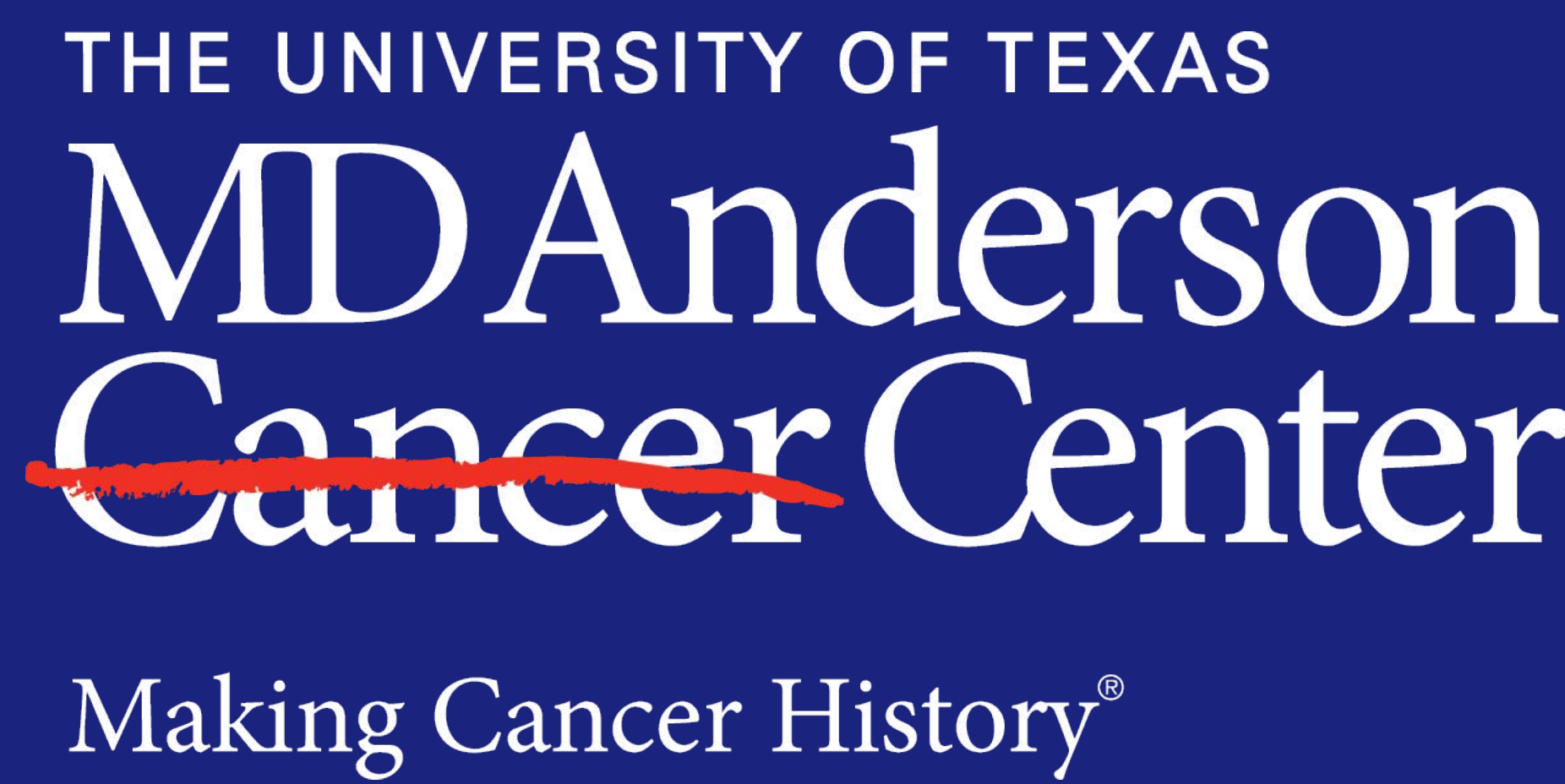


Figure 1. Ultrasound image of pericapsular nerve group (PENG) block with surrounding anatomical structures.
AIIS: Anterior Inferior Iliac Spine, IPE: Iliopubic Eminence, FA: Femoral Artery, FV: Femoral Vein

Initiation of Fragility Fracture Protocol to Improve Perioperative Outcomes in Orthopedic Oncology

Sarah Lumsden, M.D; Keyuri Popat, M.D; Evan Wright, M.D; Jodi-Ann Oliver, M.D; Julie Mani, M.D; Adeel Faruki, M.D; Linda Amatya Shrestha MSN, APRN; Jessy Kurian DNP, APRN; Andrzej P. Kwater, M.D.



“Regional Anesthesia is a key component of acute oncologic pathologic fracture management”

CASE REPORT - 2

- 83 year-old woman with metastatic urothelial carcinoma → pathologic tibial fracture with 10/10 pain in ED
- Acute pain consulted → anterior sciatic and femoral nerve block catheters
- Pain 10/10 →0-2/10 with minimal perioperative opioid use
- Catheters removed on POD2 prior to discharge

DISCUSSION

- Regional anesthesia is an effective strategy for perioperative analgesia in the setting of orthopedic oncology fractures
- Regional interventions minimize complications associated with opioid consumption in at-risk patient population
- Establishing a multidisciplinary protocol ensures that patients are offered access to regional anesthesia strategies for perioperative pain relief

PROPOSED FRAGILITY FRACTURE PROTOCOL INCLUSION CRITERIA

Acute fracture with planned surgical intervention
Orthopedic oncology assessment as block candidate
Platelet count and coagulation profile appropriate for block placement
No pre-existing neuropathy, nerve damage, or neuromuscular disease
No sign of infection overlying the area of intended block placement
No allergy to local anesthetics or adjuncts