



Radiofrequency Ablation for Long-term Pain Relief of Refractory Meralgia Paresthetica Complicated by Post-Ablation Neuritis

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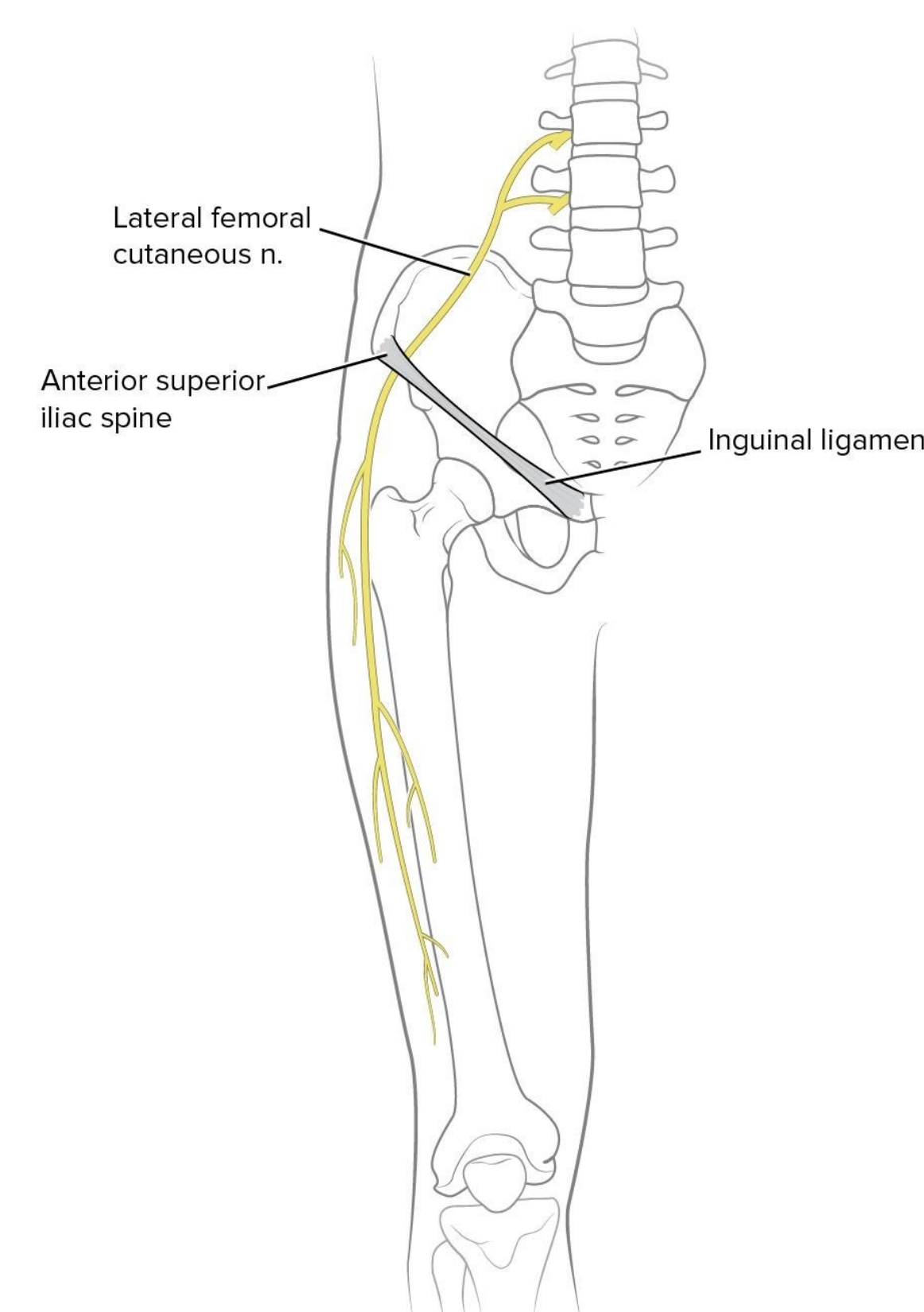
Background

- Meralgia paresthetica refers to peripheral neuropathy of the lateral femoral cutaneous nerve (LFCN) causing burning, tingling, and pain in the anterolateral thigh (L2-3).
- Predominately occurs in 30-40 y/o males with an incidence of 4.3 cases per 10,000 patients.
- Conservative therapy estimated to be ~90% successful in treating.
- Refractory cases may require surgical decompression, pulsed radiofrequency, or radiofrequency ablation (RFA).
- Most common RFA complications include neuritis, infection, bleeding, motor deficits, and/or post-ablation syndrome.

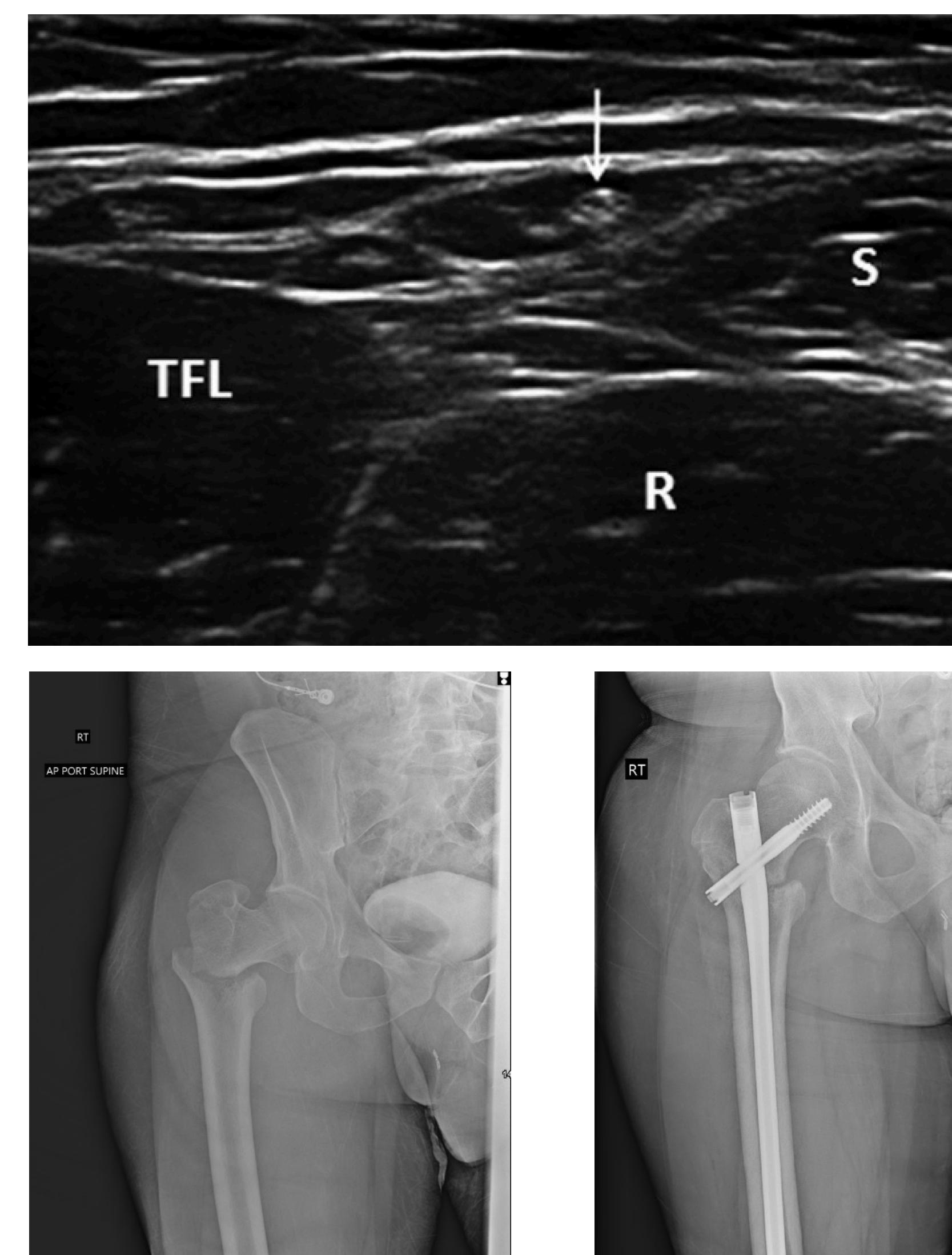
Case

- 45 y/o male with history of methamphetamine abuse presents with one year of chronic right lateral hip pain post femur nailing due to MVA.
- Post-surgery patient experienced right low extremity weakness and numerous near falls, requiring a cane for mobility.
- Failed conservative therapies.
- Diagnostic blocks x2 of the right lateral femoral cutaneous nerve with 0.25% Bupivacaine, 40 mg Triamcinolone, and 100 mcg Clonidine provided >95% relief for ~4 weeks.
- After two confirmed diagnostic blocks, patient underwent RFA of the right LFCN at 80°C for 3 minutes followed by 40mg of Triamcinolone.

Images



Anatomy of the lateral femoral cutaneous nerve.



Follow-Up

- A few days post-RFA, patient reported increased tingling, burning, and increased pain to palpation of the right lateral thigh.
- Patient had a repeat peripheral nerve block under ultrasound with excellent pain relief.
- We optimized his gabapentin dosage and are working towards approval for a peripheral nerve stimulator.

Discussion

- Often associated with diabetes mellitus, obesity, pregnancy, strenuous exercise / sports, hip and spine surgery.
- Differential includes trochanteric bursitis, nerve root radiculopathy, lumbar stenosis, and disc herniation.
- Diagnosed via clinical exam, in addition to somatosensory evoked potentials (SSEP), and/or magnetic resonance neurography (MRN).
- Conservative therapy includes physical therapy, transcutaneous electrical nerve stimulation (TENS), oral and topical pain meds.
- RFA utilizes high temperatures to induce thermal injury to the nerve.
- LFCN, 60-80% pain reduction lasting on average 4-6 months.
- Median nerve, 70% pain reduction at 3 months.
- Occipital nerve, 50-70% pain reduction at 3-5 months.
- Inconclusive data for trigeminal neuralgia and postherpetic neuralgia.
- General incidence of post-RFA neuritis estimated to be .5-9% .
- Rate not specifically known for the LFCN.
- Data inconclusive if taking neuropathic medications prior to RFA reduces the rate of neuritis.
- Data inconclusive if post-ablation steroids reduces the rate of neuritis.

References

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