



Successful Resolution of Femoral Neuropathy caused by Cardiac Catheterization with Surgical Neurolysis

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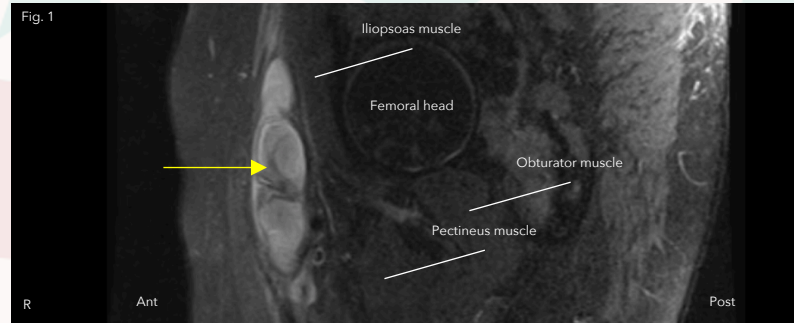
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CASE DESCRIPTION

- A 72-year-old male underwent an elective cardiac catheterization through the right groin
- The next day, he developed dysesthesia, numbness, and weakness in the right groin and anterior thigh, leading to multiple falls
- **MRI** revealed a large (8.4 x 2.4 cm) multilocular mass abutting the right femoral nerve, consistent with lymphocele (*Fig. 1 & 2*, arrow)
- **Nerve conduction study** of the right peroneal, superficial peroneal, tibial, and sural nerves were unremarkable, and showed no response for bilateral femoral nerves
- **Electromyography** revealed ↑ spontaneous activity and rapid recruitment in the vastus medialis and lateralis muscles, as well as ↑ spontaneous, consistent with **acute femoral neuropathy**
- **Surgery** with decompression and **neurolysis** (scarring encountered, no apparent lymphocele) of the right femoral nerve with sural cable autograft led to **complete symptom resolution** by 5 months post-op

FIGURES

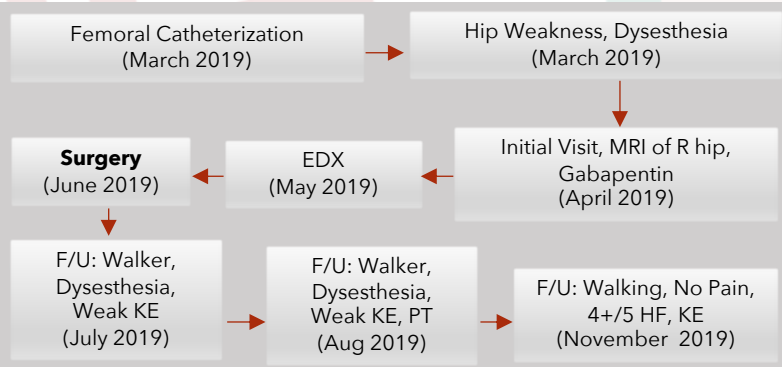


- There is currently **no consensus** on management of femoral neuropathy as a complication following catheterization
- Neurolysis has been described to be beneficial for a variety of settings from oncological pain to spasticity, but there are no reports of using it for routine management of femoral neuropathy (4,5)
- Other methods of neurolysis also exist, utilizing heat, chemical (phenol or alcohol), or cryogenic techniques, which can be performed by interventional pain physicians, typically performed for intractable cancer pain (6,7)

TAKE HOME POINT

- Physiatrists should be cognizant of **neurolysis** as an option for treatment of acute, post-procedure **peripheral neuropathy** if conservative management fails, as it requires time-sensitive surgical referral

CLINICAL COURSE



DISCUSSION

- Femoral neuropathy following cardiac catheterization is rare, with incidence as low as 0.004% (1)
- **Presentation:** pain, weakness, and dysesthesia of hip and knee region, sensory > motor (2, 3)
- Diagnosis of peripheral mononeuropathy in the thigh with nerve conduction study is technically difficult and often yields inconclusive results, as demonstrated in this case

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