Meralgia Paresthetica: Diagnostic Role of 3 Tesla MR Neurography
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Purpose:
Meralgia Paresthetica is a neurological condition of the lateral femoral cutaneous nerve (LFCN) characterized by a localized area of paresthesia and numbness along the anterolateral aspect of the thigh. There is currently no literature describing the MRN (magnetic resonance neurography) imaging findings of meralgia paresthetica.

Outline of content:
A case series of different patients describing spectrum of 3 Tesla MRN appearances of meralgia paresthetica will be discussed. High resolution MRN imaging technique for evaluation of LFCN will be discussed. 3T MRN imaging findings of normal LFCN and various LFCN pathologies such as, LS plexopathy, neuroma, nerve sheath tumor, entrapment and post-operative failure from prior attempted neurolysis will be demonstrated. Role of MRN in aiding MR guided nerve block will also be depicted with relevant case example.

Summary:
The diagnosis of meralgia paresthetica is traditionally established by clinical examination, which may not be accurate as various other regional pathologies may mimic the symptomatology. Nerve conduction studies are limited in its assessment. High resolution 3T MRN technique provides an excellent diagnostic tool to demonstrate the anatomy and pathology of LFCN.

Figures: Neuroma of right lateral femoral cutaneous nerve. 38 year old woman with clinically suspected meralgia paresthetica. Sequential axial T2 SPAIR MR images show hyperintense lateral femoral cutaneous nerve as it approaches the right anterior superior iliac spine, ASIS (arrow in left image). Notice focal neuroma just below the ASIS (arrow in right image).