MERALGIA PARESTHETICA

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The syndrome of Meralgia Paresthetica [MP] involving a burning, tingling, and numb sensation in the anterolateral area of the thigh, with variable reduction of sensation in the distribution of the lateral femoral cutaneous nerve, was first described by Bernhardt in 1895. (the Greek: word meros meaning thigh and algos, meaning pain).

Aetiology

Spontaneous causes include mechanical factors such as obesity, pregnancy and the wearing of belts, corsets, and tight trousers can also result in direct pressure on the LFCN Pelvic benign masses.

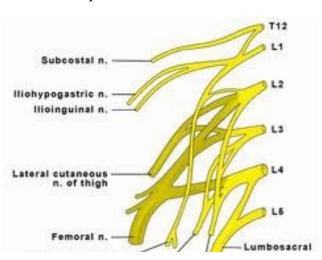
This condition can be confused with lumbosacral radicular pain. The diagnosis of MP was fairly delayed.

Iatrogenic:

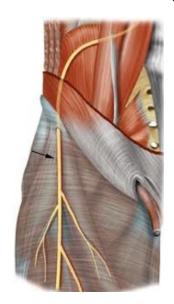
- 1. Spinal surgery in prone: protect the pressure on the ASIS
- 2. Harvest bone graft from anterior iliac [protect the nerve]
- 3. Can get damage in Iliolumbar approach to the pelvis

Relevant Anatomy

Femoral N plexus



Lateral cutaneous nerve of the thigh



Risk factors

1. Diabetes

A total of 262 patients with MP

Normal population: 32.6 per 100,000 patient years

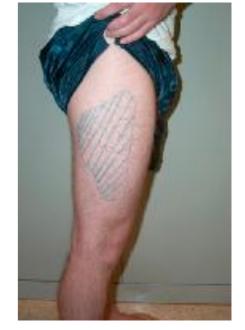
Diabetes was 247 per 100,000 patient years [7 times the occurrence of MP]

Patients with MP are 2 times more likely to develop DM.

2. The mean BMI of patients with MP (30.1 kg/m(2), was significantly higher than that of ageand gender-matched controls (27.3 kg/m(2))

Diagnosis

- 1. Insidious onset of paresthesia over the lateral aspect of the thigh
- 2. Distribution in the region of Lateral cutaneous nerve of the thigh
- 3. Intact motor and reflexes
- 4. Nerve conduction studySNAP of the LFCNSNAP <3 microvolts yields a specificity >of 98.



5. A diagnostic block may be made with 8 mL of 0.25% bupivacaine.

Treatment

Idiopathic meralgia paresthetica usually improves with nonoperative modalities, such as removal of compressive agents, nonsteroidal anti-inflammatory drugs, and, if necessary, local corticosteroid injections

If intractable pain persists despite such measures, surgery can be considered, although whether neurolysis or transection is the procedure of is `still controversial.

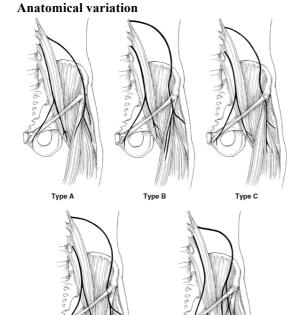
For interventional treatment of MP, such as local injection with anesthetics and corticosteroids or

Iatrogenic meralgia paresthetica has been found to occur after a number of orthopaedic procedures, such as anterior iliac-crest bone-graft harvesting and anterior pelvic procedures. Prone positioning for spine surgery has also been implicated. Although nonoperative management usually results in satisfactory results, efforts should be made to avoid injury at the time of surgery.

Surgical techniques

- 1. Neurolysis of the constricting tissue,
- 2. Neurolysis and transposition of the LFCN, and transection with excision of a portion of the LFCN.
- 3. Transection is another effective means to produce good results.

Regarding neurolysis for MP, conflicting results with failure rates as high as 40% and success rates of 90% to 95% have been reported . Why surgery works for entrapment of other peripheral nerves such as the median and ulnar nerve, but may not work for LFCN is unresolving and intriguing. This dichotomy may be due to the difficulty in establishing a correct diagnosis of MP, inability to locate LFCN due to its anatomical variability, and inadequate decompression.



- a. LFCN lying over the anterior crest 4%
- b.LFCN through the lateral part of ingunal ligament 27%
- c. LCFN through sartorial sheath 23%
- d. LCFN deep to inguinal ligament and medial to the sartorial tendon 26%
- e. Lies on the iliopsoas 20%

Plast Reconstr Surg 1997;100:600-604.)

render neurolysis difficult. Therefore, transection of the LFCN is another effective means of treating refractory MP. However, this results in permanent anesthesia on an area of the anterolateral thigh in exchange for relief of their symptoms. In one series of 14 adult patients with a follow-up over 3-6 years, reported the effectiveness of transection in case of recurrence of MP after initial relief by neurolysis.

In a recent study neurolysis was effective in relieving medically refractory MP. Neurolysis provided complete relief in nine patients (81.8%) and partial relief (18.2%) in two patients.

CONCLUSION

Neurolysis can be an effective means of treating medically refractory MP. To achieve a good outcome in neurolysis for MP, an accurate diagnosis with careful examination and repeated blocks of the LFCN, along with electrodiagnosis is essential. Possible variation in the course of the LFCN and thorough decompression along the course of the LFCN should be kept in mind in planning the decompression surgery for MP.

References

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