Meralgia Paresthetica

AKA originally known as the Bernhardt Roth syndrome, and sometimes called “swashbucler´s disease”.

Meralgia paresthetica was first described by Hager in 1885 [1].

Bernhardt reported more extensively on the condition in 1895, and 2 weeks later Roth published a paper in which he coined the term meralgia, from the Greek words meros for thigh and algos for pain [2]. and Bernhardt in 1895 [3].

Etiology

Entrapment of the lateral femoral cutaneous nerve, where it enters the thigh though the opening between the inguinal ligament and its attachment to the anterior superior iliac spine (ASIS). Anatomic variation is common, and the nerve may actually pass through the ligament, and as many as four branches may be found. May also be an initial manifestation of diabetes (diabetic neuropathy).

Usually seen in obese patients, may be exacerbated by wearing tight belts or girdles, and by prolonged standing or walking. Recently found in long distance runners. Higher incidence in diabetics. May also occur post-op in slender patients positioned prone, tends to be bilateral.

Possible etiologies are too numerous to list, more common ones include: tight clothing or belts, surgical scars post-abdominal surgery, cardiac catheterization, pregnancy, iliac crest bone graft harvesting, ascites, obesity, metabolic neuropathies, and abdominal or pelvic mass.

Khanna et al., described a case of spontaneous retroperitoneal hematoma causing femoral neuropathy following treatment with low molecular weight heparin [4].

Clinical features

Burning dysesthesias in the lateral aspect of the upper thigh, occasionally just above the knee, usually with increased sensitivity to clothing (hyperpathia). There may be decreased sensation in this distribution. Spontaneous rubbing or massaging the area in order to obtain relief is very characteristic.

MP may be bilateral in up to 20% of cases. Sitting or lying prone usually ameliorates the symptoms. There may be point tenderness at the site of entrapment (where pressure may reproduce the pain), which is often located where the nerve exits the pelvis medial to the ASIS. Hip extension may also cause pain.

Diagnosis

Meralgia paresthetica remains an obscure diagnosis for many physicians and is frequently overlooked or misdiagnosed. Many of the previous authors have not had the benefit of magnetic resonance imaging or computed tomography, and it is likely that some of the patients reported in the earlier series were actually suffering from discogenic disease or other disorders of the central nervous system. The confusion in diagnosis by some of the earlier authors, plus the fact that many of these authors reported results with very brief follow-up, probably accounts for some of the disagreement concerning the treatment of meralgia paresthetica. Despite this, meralgia paresthetica is not rare, it is readily recognized, and it responds favorably to adequate treatment [5)].

Nerve Block Test

Using 1% Lidocaine at the site where the LCNT exits the pelvis at the inguinal ligament.

The approximate site of injection is 1cm medial and inferior to the ASIS or at the point of maximum pain. The test is considered positive if the patient has immediate symptom relief that lasts 30-40 minutes after the injection.

Differential diagnosis

1. femoral neuropathy: sensory changes tend to be more anteromedial than MP

2. L2 or L3 radiculopathy: look for motor weakness (thigh flexion or knee extension)

3. nerve compression by abdominal or pelvic tumor (suspected if concomitant GI or GU symptoms)

The condition can usually be diagnosed on clinical grounds. When it is felt to be necessary, confirmatory tests may help (but frequently are disappointing), including:

1. EMG: may be difficult, the electromyographer cannot always find the nerve)

2. MRI or CT/myelography: when disc disease is suspected

3. pelvic imaging (MRI or CT)

4. somatosensory evoked potentials

5. response to local anesthetic injections

6. recent promise of diagnostic ultrasound using high frequency (18 MHz) probes

Treatment

see Meralgia Paresthetica Treatment.

Recurrence

Recurrence of meralgia paresthetica after a pain-free interval following a neurexeresis or neurectomy procedure has not been reported before.

de Ruiter et al. present a case of recurrence 5 years after neurexeresis of the lateral femoral cutaneous nerve. Resection of the proximal stump through a suprainguinal approach in this case again led to complete and long-lasting pain relief [6].

1)
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3)
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4)
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