Treatment of Meralgia paraesthetica with Topical Capsaicin

L. Puig
M. Alegre
J.M. de Moragas

Department of Dermatology, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

Meralgia paraesthetica is an uncommon neurologic disorder usually caused by compression of the lateral femoral cutaneous nerve. This nerve leaves the pelvic cavity at the anterosuperior iliac spine below the inguinal ligament and superficial to the sartorius muscle. In its course it is vulnerable to entrapment, generally related with obesity, pregnancy or unknown causes [1]. Meralgia paraesthetica has also been described to appear as a result of neuromas [2], malignant tumours of the psoas muscle [3], metastatic carcinomas in the second lumbar vertebra [4] or following coronary bypass surgery [5], due to compression arising from prolonged supine position on the operating table.

Meralgia paraesthetica is clinically characterized by a disturbed sensation at the anterolateral side of the thigh. Patients can complain of pain, numbness, itching or dysaesthesia, and the perception of pinprick and touch is often diminished or lost. In some cases they refer a burning pain that can be unbearable. The femoral cutaneous nerve is only sensitive so the motor function remains uninvolved and the reflexes are normal. Electrophysiologic tests and somatosensory evoked potentials can be useful as diagnostic procedures [6]. Many treatments have been advocated for meralgia paraesthetica [2]. Analgesia can be provided by nerve block or local infiltrations. Surgical procedures include neurolysis, transposition or decompression of the nerve and mobilization of the supra-inguinal ligament. The possible efficacy of topical capsaicin in the treatment of meralgia paraesthetica has not been previously reported, to our knowledge.

A 54-year-old man was referred for evaluation of dysaesthesia in the anterolateral right thigh. His medical history included partial epileptic crisis due to a congenital arachnoid cyst in the left parietotemoro-occipital area which had been treated with carbamazepine for the last 3 years. He also suffered from aquagenic pruritus which was well controlled with the administration of hydroxyzine before showers. He complained of paraesthesias, numbness, itching and burning sensations localized on the anterolateral aspect of the right thigh of 2 months’ evolution. Physical examination did not reveal any cutaneous abnormality, and the results of complete blood cell counts and biochemical parameters were normal. The sensory response of both femorocutaneous nerves could not be evoked on electrophysiological examination. The patient was instructed to apply topical 0.025% capsaicin cream five times daily on the lateral aspect of
his right thigh. This treatment was followed by a marked relief of his symptoms in 5 days. When the medication was stopped, for financial reasons, the symptoms returned within approximately 20 days. Capsaicin 0.025% cream and placebo were applied five times a day for 15 days each, with a wash-out period of 7 days in a double-blinded placebo-controlled therapeutic trial, showing the efficacy of topical capsaicin treatment, which has been thereafter supplied to the patient to continue his treatment.

Topical capsaicin has been used in several dermatologic and peripheral pain disorders such as neuralgia postherpetica, notalgia paraesthetica, brachioradial pruritus, diabetic neuropathy, postmastectomy neuroma, reflex sympathetic dystrophy syndrome, rheumatoid arthritis, pruritic lesions of psoriasis, haemodialysis-associated itching, vulval ves-tibulitis and apocrine chromhidrosis [7-12]. Capsaicin is a natural plant product that selectively excites C-polymodal nociceptors and eventually produces a desensitization, leading to improvement of pain and itch [13]. Capsaicin reduces the area of flare produced by histamine and consequently diminishes sensations of heat, pain and neurogenic vasodilatation presumably via desensitization of heat-sensitive nociceptors [14]. Topical administration depletes and prevents the re-accumulation in peripheral sensory neurons of substance P, which is involved in the transmission of pain and possibly itch sensations [15]. This case report provides clinical evidence of the potential usefulness of topical capsaicin for symptomatic relief of meralgia paraesthetica. Topical capsaicin is a usually well-tolerated non-aggressive treatment which would deserve trial before considering the use of other more invasive therapeutic procedures. A therapeutic trial in a series of patients is required to confirm our results.

References
study using just capillaroscopy, since only single cases in our very large series did not show any abnormalities in the nail fold capillaries [2]. There is also a characteristic capillaroscopic pattern of dermatomyositis, which may be of importance in differentiating it from scleroderma: the loops are giant with irregular shape, showing various deformities and dilatations throughout the whole length (bushy capillaries), and not only in the central part as in Raynaud’s loops, with a very enlarged subpapillary plexus and hemorrhages [3]. These abnormalities were found in 61% of cases, in some patients the loops were of Raynaud’s type, in some the capillaries were unchanged. Repeated examinations for several years.

I read with great interest the paper by Ohtsuka and Ishikawa [1] on the statistical definition of nail fold capillary pattern in systemic sclerosis with videographs quantitatively analyzed by a computer and an image processor. This study presents a step forward in nail fold capillaroscopy. The conclusion of the study was that 9% of patients with systemic sclerosis showed a normal capillary pattern, a percentage which is much higher than the one we found in our patients (up to 20 years) have shown remarkable t changes in the capillaroscopic pattern with the disappearance of bushy capillaries and extravasations, whereas repeated studies in patients with systemic scleroderma showed persistence or progression of capillary abnormalities characteristic of systemic sclerosis. The authors indicate a normal capillary pattern in systemic lupus erythematosus, and we found in a proportion of cases (about 60%) divergent abnormalities of the loops, some with the characteristic pattern of Raynaud’s phenomenon [4]. However, the capillary changes in systemic lupus erythematosus are not characteristic of the disease and therefore have no diagnostic significance.