

Brachioradial pruritus treated with thalidomide* *Prurido braquiorradial tratado com talidomida**

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Abstract: Brachioradial pruritus is a type of itching or a very intense burning sensation in the anterior or distal third of arms and proximal third of forearms, corresponding to the brachioradial muscle region. The condition has been associated with solar radiation, and some authors related to orthopedic lesions in the cervical spine. The author presents two patients suffering from brachioradial pruritus who were treated with thalidomide and presented excellent results. This paper aims to suggest a new therapeutic option for this refractory disease.

Keywords: Pruritus; pruritus/therapy; Thalidomide

Resumo: Prurido braquiorradial é um tipo de prurido ou sensação de ardor intenso que acomete a região anterior do terço distal dos braços e terço proximal dos antebraços, correspondendo à região do músculo braquiorradial. A doença tem sido associada à radiação solar e também, cogitou-se, a lesões ortopédicas na coluna cervical. Uma das características da doença é a refratariedade ao tratamento. O autor apresenta duas pacientes com prurido braquiorradial tratadas com talidomida, com resultados excelentes.

Palavras-chave: Prurido; Prurido/terapia; Talidomida

Brachioradial pruritus (BP) is a type of itching or a very intense, persistent and chronic burning sensation in the arm and forearm skin in the brachioradial muscle region. Its etiology is unknown, but solar exposition and/or cervical spine lesions seem to be triggering, or at least, aggravating factors. The disease has had several names, such as solar pruritus of the elbows, brachioradial summer pruritus, solar pruritus, solar brachioradial pruritus, photobrachioradial pruritus, forearm neuropathy, but the most used nomenclature in the literature is brachioradial pruritus.

In 1968, Waisman¹ first described cases of patients presenting very intense and persistent pruritus in the brachioradial muscle region skin and associated it to solar radiation. The skin was normal in the region affected and pruritus was not relieved using topical and systemic steroids, antihistamines and tranquilizers. In 1979, Kestenbaum et al. reported a patient with a similar picture described by Waisman and called it solar pruritus. Heyl,² in 1983, associated the condition with orthopedic alterations in the cervical spine. Five patients were submitted to cervical spine radiography and four presented changes, primarily osteoarthritis. In 1986, Walcyk et

al.³ described 42 cases; in that, 13% had cervical arthritis, 19% had neck trauma, and 10% presented nerve entrapment. Bernhard⁴ stated that the terminal nerve fibers in the elbow might be simultaneously altered by cervical spine orthopedic involvement and solar radiation. Sometimes one factor prevails, sometimes another.

Since the first description by Waisman, approximately 200 BP cases have been reported. All patients were adults, white, aged 18-80 years. The duration of symptoms ranged from one month to 18 years, in average, five years. As to sex, there was a slight predominance of males (55% vs. 45%). As to site, 60% of patients had bilateral manifestation, and 40% had one limb affected. Approximately 18% had orthopedic alteration in the cervical spine, and only 10% associated symptoms with solar radiation. Few patients were submitted to biopsy – in such cases, the skin was normal or with slight solar elastosis. All patients described lived in a hot climate region. BP is significantly characterized by refractory treatment. Systemic and topical steroids, antihistamines, anti-inflammatory drugs and tranquilizers are ineffective.⁵ Capsaicin cream 0.025% may be effective but recurrences are frequent.⁶ Oral gabapentin was used with

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FIGURE 1: Areas highlighted in red show the region affected by brachioradial pruritus in Patient 1.

promising results.⁷ Tait et al.⁸ treated 14 patients with cervical spine traction and 10 improved symptoms.

Case 1 - Patient resident in Guarulhos, SP, 55-years-old, female, white, fell down 15 years ago and broke her coccyx. She has presented intense pruritus in the anterior elbow for 10 years (Figure 1). Pruritus was more intense when exposed to sun. The dermatological examination showed normal skin. She had been submitted to topical and systemic treatments with no relief. Diagnosis of BP was made based on the clinical history. Cervical spine radiography revealed reduced discal space between C5 and C6 and discopathy in C5. The patient did not tolerate treatment with capsaicin. Thalidomide 100mg was introduced once a day and the response was immediate and effective. The patient became completely asymptomatic within a few days.

Case 2 - Patient residing in Guarulhos, SP, 56-years-old, female, white, complained of intense pruritus in upper limbs for many years, which aggravated

in the summer. She denied spine or neck trauma. Cervical spine radiography revealed cervical spondyloarthrosis between C5-C6 and C6-C7. Pruritus was so intense that the patient could not perform her activities of daily life. She used several topical and systemic medicines with no improvement. The clinical picture was compatible with BP. Based on the previous case, thalidomide 100mg/day was prescribed. In only 10 days the symptoms significantly improved and the patient could return to her normal social activities.

The patients described had intense and bilateral BP from the anterior distal third of arms to the mid-third forearms, corresponding approximately to the brachioradial muscle region (Figure 1). Both women were very anxious about their condition and had sleep disorders. Unlike symptoms, the skin was absolutely normal in the region. Any treatment prescribed was not satisfactory. In Brazil, Proença⁹ drew attention to the use of thalidomide in "difficult-to-control morbid processes". Thalidomide has been very useful to treat photosensitive diseases, such as discoid lupus erythematosus, light polymorphic eruption⁸, and particularly actinic prurigo¹⁰. Since there is no specific medication and both patients were menopausal, thalidomide was chosen and the results were astonishing. The treatment was prescribed for 60 days, and 30 days after discontinuation both patients continued asymptomatic. Strict clinical examination of the patients was performed every fortnight, because one of the most significant side effects of thalidomide is peripheral neuropathy, although it is dose-dependent and reversible when the drug is discontinued.⁹ Teratogenesis was not taken into account for both women had been in menopause for some years.

The treatment for BP with thalidomide is therefore reported, presenting excellent results, since the symptoms significantly disappeared within a short period of time. □

REFERENCES

1. Waisman M. Solar pruritus of the elbows (brachioradial summer pruritus). *Arch Dermatol.* 1968; 98:481-85.
2. Heyl T. Brachioradial pruritus. *Arch Dermatol.* 1983; 119:115-16.
3. Walcyk PJ, Elpern DJ. Braquiorradial pruritus: a topical dermopathy. *Br J Dermatol.* 1986; 115:177-80.
4. Bernhard JD. Editor's comment. *J Am Acad Dermatol.* 1999; 41:658.
5. Wallengren J. Brachioradial pruritus: a recurrent solar dermopathy. *J Am Acad Dermatol.* 1998; 39:803-6.
6. Goodless DR, Eaglstein WH. Brachioradial pruritus: treatment with topical capsaicin. *J Am Acad Dermatol.* 1993;29:783-4.
7. Bueller HA, Bernhard JD, Dubroff LM. Gabapentin treatment for brachioradial pruritus. *J Eur Acad Dermatol Venereol.* 1999; 13:227-30.
8. Tait CP, Grigg E, Quirk CJ. Brachioradial pruritus and cervical spine manipulation. *Austr J Dermatol.*1998; 39:168-70.
9. Proença NG. Emprego da talidomida em dermatologia. *An Bras Dermatol.* 1995; 70:61-7.
10. Grabczyska SA, Hawk JL. Managing PLE and actinic prurigo. *Practitioner.* 1997; 241:74-9.

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