

Scalp dysesthesia. Case report

Disestesia do escalpo. Relato de caso

Letícia Arrais Rocha¹, João Batista Santos Garcia¹, Thiago Alves Rodrigues¹

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ABSTRACT

BACKGROUND AND OBJECTIVES: Scalp dysesthesia is characterized by the presence of several localized or diffuse symptoms, such as burning, pain, pruritus or stinging sensations, without objective findings in the physical examination of the patient that can explain and link the existing symptomatology to some other etiology. The aim of this study was to describe a case of scalp dysesthesia, from its clinical and laboratory investigation and the conduct adopted.

CASE REPORT: A 38-year-old male patient, first assigned to the Dermatology Service, with complaints of pruritus in the scalp for 5 years. In the consultation at the Pain Service, the patient complained of daily, intermittent and burning dysesthetic sensations, such as tingling and pruritus in the bipariethoccipital region, worsening with heat and associated with severe pain in the cervical region. Upon physical examination, evidence of excoriations associated with this pruritus was found. The patient received conservative pharmacological treatment, with significant improvement of the symptomatology after 3 months.

CONCLUSION: Larger prospective studies are needed to further characterize the pathogenesis of scalp dysesthesia, to generate optimization of the available therapeutic options and consequently improve the care that is given to patients. This report corroborates with some findings already described in the literature, such as the association with cervical alterations and the improvement through the use of low-dose antidepressants and anticonvulsants such as gabapentin.

Keywords: Pain, Paresthesia, Pharmacological treatment.

RESUMO

JUSTIFICATIVA E OBJETIVOS: A disestesia do escalpo caracteriza-se pela presença de diversos sintomas localizados ou difusos, como queimação, dor, prurido ou sensações de picada, sem achados objetivos no exame físico do paciente que possam explicar e ligar os sintomas existentes à alguma outra etiologia. O objetivo deste estudo foi descrever um caso de disestesia de escalpo, desde a sua investigação clínica e laboratorial, até a conduta adotada.

RELATO DO CASO: Paciente do sexo masculino, 38 anos. Primeiramente foi ao serviço de Dermatologia com queixa de prurido em couro cabeludo há cinco anos. Na consulta do Serviço de Dor, o paciente queixava-se de sensações disestésicas como: formigamento e prurido em região biparieto-occipital que piora com o calor, associada à dor de forte intensidade, diária, intermitente e em queimação na região cervical. No exame físico, foram encontradas evidências de escoriações ligadas a esse prurido. O paciente recebeu tratamento farmacológico conservador, com melhora importante do sintoma após 3 meses.

CONCLUSÃO: São necessários maiores estudos prospectivos para caracterizar ainda mais a patogênese da disestesia do escalpo, gerar otimização das opções terapêuticas disponíveis e, consequentemente, melhora na atenção prestada aos pacientes acometidos. Este relato corroborou alguns achados já descritos na literatura, como a associação com alterações cervicais e a melhora por meio do uso de antidepressivos em baixas doses e de anticonvulsivantes como a gabapentina.

Descritores: Dor, Parestesia, Tratamento farmacológico.

INTRODUCTION

Scalp dysesthesia (SD), first described in 1998¹, is classified as one of the several chronic cutaneous pain syndromes. It is characterized by the presence of several localized or diffuse symptoms, such as burning, pain, pruritus or stinging sensations, in the absence of a primary cutaneous disorder^{2,3}. It is often underdiagnosed and mistaken for seborrheic dermatitis⁴. It can be caused by a psychiatric condition, nerve injury, muscle tension, or direct surgical injury. It represents a type of chronic pain syndrome with pruritus in the scalp transmitted via afferent amyelinated C fibers⁵. However, there is no consensus on the pathophysiology, in part due to the great anatomical complexity and all components of the scalp region, such as microflora, regionally produced sebum, and neural circuits, which may influence the manifestations of possible alterations in the region³. SD's management is not standardized, considering that there are no larger studies^{1,2}.

Letícia Arrais Rocha – <https://orcid.org/0000-0001-9379-1283>;
Thiago Alves Rodrigues – <https://orcid.org/0000-0003-3086-6844>;
João Batista Santos Garcia – <https://orcid.org/0000-0002-3597-6471>.

1. Universidade Federal do Maranhão, Hospital Universitário, Ambulatório de Dor, São Luís, MA, Brasil.

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Correspondence to:

Letícia Arrais Rocha

R. Barão de Itaparí, 282 – Centro

65070-220 São Luís, MA, Brasil.

E-mail: larraisrocha@gmail.com; thigoalves2005@gmail.com

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This report aimed to describe a case of SD, from its clinical and laboratory investigation and the conduct adopted.

CASE REPORT

A 38-year-old male patient, first assigned to the hospital's Dermatology Service, with complaints of pruritus in the scalp for five years. Dermoscopic examination discarded seborrheic dermatitis, psoriasis, postherpetic pruritus, and other scalp disorders. The patient was then referred to the Pain Service. During the consultation, the patient complained of pruritus in the scalp, such as tingling and pruritus in the biparietal occipital region, worsening with heat and associated with daily, intermittent and burning severe pain in the cervical region. After a new physical examination, evidence of excoriations associated with this pruritus was found. A magnetic resonance imaging (MRI) of the cervical region and skull was requested, for assessing possible anatomical changes that could explain the picture. The clinical treatment started with gabapentin (300mg) every 12 hours, combined with amitriptyline (12.5mg) in a single daily oral dose.

MNR showed physiological rectification of the cervical spine, peripheral osteophytes with formation of syndesmophytes in the C6 and C7 vertebral bodies, height reduction and dehydration of their respective vertebral discs, characterized by hyposignal on T2, disc-osteophyte complex posterior to C6-C7, with reduced amplitude of the corresponding neuroformations and small central focal protrusion at C3-C4 level.

After the treatment started, an electroneuromyographic study was performed with a sensory threshold test in the parietal, temporal, frontal, and occipital regions, and the bilateral symmetrical sensitivity threshold was within normal limits. Adjusting for daily doses of gabapentin (900mg) and amitriptyline (25mg), the patient presented a significant improvement in pruritus and paresthesia in the occipital region within three months, only showing sporadic episodes associated with the sun exposure in the region related to his work activity.

DISCUSSION

SD is described as one of the several chronic cutaneous pain syndromes, which includes burning mouth, vulvodinia, scrothodiosis, and atypical facial pain¹⁻³. It has no preference for race or gender, nor is it considered a serious disease, but it has several negative impacts on the patient's quality of life⁶.

It is clinically characterized by the presence of several localized or diffuse symptoms, such as burning, pain, pruritus, or stinging sensations, and more than one dysesthetic sensation may be present in the same area⁴. In order to make the diagnosis, which is essentially clinical, the absence of a primary cutaneous disorder is necessary, and in the literature some dermatoscopic patterns are proposed in patients with this syndrome. In trichoscopy, the most common were trichoptilosis and lesions covered by small and uniform hair,

some of which had characteristics of trichorrhexis nodosa, with findings indicating mechanical injury⁵. In the reported case, there were no physical examination findings at the first visit, and only after a new examination, minor excoriations were found.

The patient had cervical spine abnormalities on imaging, which is common, especially in the form of degenerative disc disease. The pathogenesis of this abnormality on cervical imaging may be associated, as stated above, with chronic muscle tension placed on the pericranial muscles and scalp aponeurosis, secondary to spinal disease shown in the image^{2,8}. It may or may not be associated with psychiatric disorders, and the most common disorders are persistent depression, generalized anxiety and somatization^{2,6}. Although the findings corroborate the etiological theories found in the literature, there is no consensus on the SD origin.

There is no consensus on the SD treatment, but there are some options in the literature demonstrating a good response. As the SD is a syndrome associated with changes of the fine fibers, it is treated as a neuropathy, using gabapentin associated with a low dose of tricyclic antidepressants, in this case, amitriptyline, achieving satisfactory results. Most cases already reported in the literature, as well as the present one, showed good response and even complete absence of reported clinical symptoms¹⁻⁴. Among other forms of treatment, there is the association of drugs, not yet available in Brazil, made of amitriptyline, ketamine and lidocaine⁴, in addition to physical exercise and physiotherapy, since the SD can be directly related to cervical and spine problems⁸.

This syndrome is characterized as a challenging and frustrating condition for the patient and the physician, as it has no pathogenesis or well-established or even evidence-based treatments. It is necessary to standardize the therapeutic approach by conducting further studies on the subject, such as the best route of administration, dose, and drug.

CONCLUSION

This report corroborates some results already described in the literature, such as the association with cervical alterations and the improvement using low-dose antidepressants and anticonvulsants such as gabapentin.

REFERENCES

1. Hoss D, Segal S. Scalp dysesthesia. *Arch Dermatol.* 1998;134(3):327-30.
2. Thornsberry LA, English JC 3rd. Scalp dysesthesia related to cervical spine disease. *JAMA Dermatol.* 2013;149(2):200-3.
3. Sarifakioglu E, Onur O. Women with scalp dysesthesia treated with pregabalin. *International J Dermatol.* 2012;52(11):1417-8.
4. Kinoshita-Ise M, Shear NH. Diagnostic and therapeutic approach to scalp dysesthesia: a case series and published work review. *J Dermatol.* 2019;46(6):526-30.
5. Rakowska A, Olszewska M, Rudnicka L. Trichoscopy of scalp dysesthesia. *Postepy Dermatol Alergol.* 2017;34:245-7.
6. Shumway NK, Cole E, Fernandez KH. Neurocutaneous disease: neurocutaneous dysesthesias. *J Am Acad Dermatol.* 2016;74(2):215-28.
7. Bin Saif G, Ericson ME, Yosipovitch G. The itchy scalp--scratching for an explanation. *Exp Dermatol.* 2011;20(12):959-68.
8. Laidler NK, Chan J. Treatment of scalp dysesthesia utilising simple exercises and stretches: a pilot study. *Australas J Dermatol.* 2018;59(4):318-21.

