INTRODUCTION

Trigeminal trophic syndrome (TTS) was first described in 1901 by Adolf Wallenberg. He also described Wallenberg's medullary lateral syndrome by occlusion of the inferior posterior cerebellar artery, one of the causes of TTS.

It is a rare condition resulting from manipulation of the skin after peripheral or central injury of the trigeminal nerve. In the classic clinical picture, there is trigeminal anesthesia, facial paresthesia, and unilateral ulcerations on the face. It is a differential diagnosis of unilateral ulcerations, such as carcinoma, syphilis, and deep mycoses, among others.

Among the main causes of TTS are iatrogenic in the treatments of trigeminal neuralgia; Wallenberg's lateral medullary syndrome; infectious diseases such as shingles, tertiary syphilis, leprosy, and leishmaniasis; traumas; craniotomy; tumors; and systemic diseases, such as Wegener's granulomatosis.

The trigeminal nerve is a mixed, sensory, and motor nerve. Its name comes from its three divisions: ophthalmic (V1), maxillary (V2), and mandibular (V3). V1 is responsible for the sensitivity of the forehead to the apex of the scalp, upper eyelid, eyes, anterior region of the nose, and upper nasal cavity. V2 and V3 innervate the middle and lower regions of the face.

In TTS, V2 is the most commonly affected branch. In this way, the classic clinical picture is of a small crust in the nasal wing, which can evolve with increasing ulceration and extend to the malar region and upper lip. The nasal tip is usually spared, as it is innervated by the ethmoidal branch of V1.

Pityriasis amiantacea is known as a clinical syndrome that affects the scalp. It is presented with shiny, silvery scales similar to mica, which adhere to each other and surround...
CASE REPORT

A 69-year-old female patient presented to the dermatology clinic for a scalp injury she had for a year. She reported intense pruritus on the spot and sore pangs. On physical examination, there were yellowish, coarse crusts attached to the apex of the scalp associated with fine, diffuse scaling on the scalp [Figure 1] and seborrheic areas on the face. The main diagnostic hypothesis was pityriasis amiantacea, and we started treatment for seborrheic dermatitis with ketoconazole shampoo, antibiotics associated with topical corticosteroids, and mineral oil to remove the crusts.

The patient returned in several consultations, for a year, without improvement of the lesion and with the appearance of a new plate surmounted by a crust next to the old one [Figure 2]. During the consultation, the crust was removed with mineral oil, exposing a clean, erythematous ulcer, with bloody discharge [Figure 3], that was intensely painful. The patient revealed that she had herpes zoster on her scalp 2 years before, at the same site, during treatment with chemotherapy for Hodgkin’s lymphoma.

Based on the location and history of herpes zoster, a diagnosis of TTS with V1 involvement was made. She was instructed not to manipulate the lesion, although the patient denied this fact, and we introduced gabapentin 600 mg/day.

DISCUSSION

Although TTS characteristically affects the ipsilateral nasal wing, the malar region, and the upper lip, which corresponds to the dermatomes V2 and V3, it can affect any territory of V3, with formation of lesions on the scalp. TTS after herpes zoster on the scalp is uncommon.

The reported case resulted in a differential diagnosis of lesions on the scalp, such as pityriasis amiantacea, which, however, do not evolve with ulceration. Removal of the crust, review of the patient’s pathological history, and knowledge of TTS were essential for the final diagnosis of the case.

A retrospective study of 14 clinical cases of TTS and a literature review conducted in 2008 showed that most patients handled the site of ulcer formation. Our patient denied manipulation. Consequently, TTS cannot be excluded if the patient denies this action.⁴

In our case, pityriasis amiantacea was excluded due to a diagnosis of TTS that was made based on the past medical tufts of hair. Among the possible etiologies are seborrheic dermatitis as the most frequent, followed by psoriasis and local infections.⁶
history of herpes zoster on the scalp and the presence of painful ulcers on the region that started to heal with gabapentin treatment.

In this syndrome, if there is a clear relationship with peripheral or central neural damage, the histopathology is not necessary, as in our case. Histopathology would show only chronic ulcer with minimal infiltrate. It can be performed to exclude malignancies, granulomas, and vascular lesions.\footnote{7}

An important aspect of the treatment is to discourage self-mutilation, and devices may be used to protect the injured area. Pharmacotherapy with gabapentin, benzodiazepines, amitriptyline, carbamazepine, and chlorpromazine has been used with variable results.\footnote{8}

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

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