

## RELATO DE CASO

ASHY DERMATOSIS - A CASE REPORT FROM PALMAS - TO  
DERMATOSE CINZENTA (EDP) UM RELATO DE CASO EM  
PALMAS – TO

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## ABSTRACT

**INTRODUCTION:** Ashy dermatosis is a rare dermatosis of unknown etiology and pathogenesis, more common in people with darker skin. However, in this case report, the patient is white. **CASE REPORT:** A 54-year-old white woman with a history of asymptomatic gray-stained macules located on the craniocaudal axis. Despite a positive antinuclear antibody (ANA) test, the use of Plaquinol was suspended due to the fact that the patient did not present rheumatologic affections. A biopsy compatible with the condition of ashy dermatosis and post-inflammation pigmentation was performed. However, the anatomopathological examination revealed superficial perivascular dermatitis with pigmented incontinence and skin fragments, a discreet superficial perivascular inflammatory mononuclear infiltrate and mild pigmentary incontinence, confirming the clinical hypothesis of ashy dermatosis. A skin lightening lotion (Arbutin 4%, Chromabright 0.5%, Alfabisabol 1%, Nicotinamide 4%, Kojico Acid 3%, Nonionic Cream) was used for 30 days with satisfactory results, along with the substitution of antihypertensive medication. **FINAL CONSIDERATIONS:** The report is relevant because it is necessary to know this pathology for differential diagnosis of pigmented dermatosis and so that the best treatment can be prescribed.

**Keywords:** Ashy Dermatitis; Hyperpigmentation; Erythema Dyschromicum Perstans.

 ACESSO LIVRE

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## RESUMO

**INTRODUÇÃO:** A dermatose cinzenta é uma dermatose rara, de etiologia e patogenia desconhecida, mais comum em pessoas de pele mais escura, porém no caso relatado a paciente é branca. **RELATO DE CASO:** Mulher de 54 anos de idade, branca, com história de máculas de coloração acinzentada, assintomáticas, localizadas no eixo craniocaudal. Apesar do FAN positivo, o uso de Plaquinol foi suspenso pela paciente não apresentar afecção reumatológica. Foi realizada uma biópsia compatível com o quadro de dermatose cinzenta bem como pigmentação pós-inflamação. No entanto, no exame anatomopatológico foi encontrada dermatite perivascular superficial com incontinência pigmentar e em fragmentos de pele, um discreto infiltrado inflamatório mononuclear perivascular superficial e leve incontinência pigmentar, confirmando a hipótese clínica de dermatose cinzenta. Uma loção clareadora (Arbutin 4%, Chromabright 0,5%, Alfabisabol 1%, Nicotinamida 4%, Ácido Kojico 3%, Creme não iônico) foi utilizada por 30 dias apresentando resultados satisfatórios, além da substituição do anti-hipertensivo. **CONSIDERAÇÕES FINAIS:** O relato é relevante pois deve-se conhecer essa patologia para diagnose diferencial das dermatoses pigmentadas e desta forma optar pela melhor conduta terapêutica.

**Palavras-chave:** Dermatose cinzenta; Hiperpigmentação; Eritema Discrômico Persistente.

**INTRODUCTION**

Ashy dermatosis or erythema dyschromicum perstans (EDP) is a clinical syndrome characterized by grayish-blue hyperpigmentation of skin, with slow, chronic and benign progression. Clinically, it is presented with numerous grayish-blue stains of different sizes, slightly raised erythematous margins, occurring mostly on the face, trunk and upper limbs.<sup>[1- 7]</sup> They are typically asymptomatic and tend to coalesce, sparing mucous membranes, palms, soles and scalp.

Initially described by Ramirez in 1957, ashy dermatosis is more common in darker-skinned people, such as Latin Americans and indigenous population, and does not suffer influence from the environment, food, nor occupation, but has been reported in people with lighter skin and diverse ethnicities. It is a rare condition whose etiology is undetermined. However, associations with endocrinopathies, nematode infestations, exposure to pesticides, cobalt allergy, administration of radiological contrast and HIV infection are mentioned.<sup>[6-7]</sup>

We report the case of a patient with a diagnosis of ashy dermatosis previously treated as other pathologies. It is important to know this pathology for differential diagnosis of pigmented dermatoses.

**CASE REPORT**

A 54-year-old white female patient noticed the onset of a gray-stained macule in the chin region with subsequent onset of similar lesions in the abdomen, and upper and lower limbs. She underwent treatment with Hydroxychloroquine sulfate (Plaquenil) for eight months. However, the rheumatologist suspended the treatment due to the fact that the patient did not have a rheumatologic disease, although the ANA test was positive, causing the suspicion of systemic erythematosus lupus.

Dermatological examination demonstrated the generalized presence of hyperchromic spots, with a chronic course, affecting the craniocaudal axis (See images below). The patient denied having erythema prior to the greyish macules, local pruritus, and that it worsened with sunlight.



Figure 1: macules on chest

Figure 2: macules on neck



Figure 3: macules on back

Figure 4: macules on arm

An inventory of medications in use, along with foods and chemicals was requested to exclude other pathologies that could be linked to these products. This led to the suspension, until the definitive diagnosis, of the use of formaldehyde in hair products. Also, Vasopril (antihypertensive) was traded for testing, since as possible adverse effects there are severe skin reactions or other skin manifestations.

In order to lighten the lesions, the use of Laser CO2 was attempted – High 10 3 #/ Acroma 5mm on the right forearm / 7mm Acroma in the left forearm. However, it did not present satisfactory results. In 2014, a biopsy that was performed was compatible with fixed pigment erythema, but it is not such clinically.

In another biopsy performed in 2016, pathology verified the presence of superficial perivascular dermatitis with pigment incontinence and skin fragments, a discreet superficial perivascular mononuclear inflammatory infiltrate and mild pigmentary incontinence. Such morphological findings, though subtle, suggest the clinical hypothesis ashy dermatosis (Persistent Dyschromatic Erythema) as well as post-inflammation pigmentation.<sup>4</sup>

Lightening lotion (Arbutin 4%, Chromabright 0.5%, Alf abisabol 1%, Nicotinamide 4%, Kojico Acid 3%, Nonionic Cream) was then prescribed por use at night on all spots, and after 30 days, it was observed that lightening of the macules and skin rejuvenation occurred. However, there was no lightening of the infra-mammary region and of the upper limbs' macules. Thus, the conduct was maintained and the antihypertensive was changed as recommended.

**DISCUSSION**

Ashy dermatosis still has unknown etiology and pathogenesis. However, infections, intoxications and sensitization to allergens are likely causes.<sup>7,8</sup>

Clinically, it is characterized by slow growing grayish-brown to grayish-blue macules, which vary from 0.5 to several centimeters, distributed symmetrically or not. They are found preferentially on the face, cervical region, cervix, trunk, and limbs in their proximal region. Initially, it presents itself in a localized form and disseminates through a peripheral thin erythematous border, that may be 1 to 2mm thick. This border is present in acute lesions, but may be replaced by a hypochromic halo.<sup>[4- 12]</sup> An important fact is that ashy dermatosis appears more often in patients with darker colored skin, but the patient reported is white.

As for the histopathological findings, there isn't a specific pattern, and include vacuolization of the basal layer, necrosis of basal keratinocytes, colloid bodies, lymphocyte exocytosis, pigmentary incontinence and lymphocytic inflammatory perivascular infiltrate.<sup>4</sup> In the patient described, the superficial inflammatory perivascular infiltrate and slight pigmentary incontinence were discreetly found.

As for differential diagnosis, lichen planus pigmentosus, post-inflammatory hyperpigmentation, figurative erythema, drug induced rashes, Addison's disease and hemochromatosis should be mentioned. Among these, lichen planus pigmentosus

is the most similar dermatosis to ashy dermatosis, and was considered a variant of lichen planus in the past. Nowadays, they are considered pigmentary disorders, separated by most authors.<sup>4</sup>

Numerous treatments have been proposed for the condition, due to the fact that a standard therapy has not yet been established. Due to a lack of consistent results, it was decided that a lightening lotion (Arbutin 4%, Chromabright 0.5%, Alfabisabol 1%, Nicotinamide 4%, Kojico Acid 3%, Nonionic Cream) would be used, which presented satisfactory results.

## FINAL CONSIDERATIONS

Ashy dermatosis is a rare pigmentary disorder where the skin changes colors to a grayish-blue. This pathology should be known for the differential diagnosis of pigmented dermatoses and, therefore, for the best therapeutic approach to be chosen. It appears more frequently in darker skinned people, although the patient reported is white, which is even more curious, from a scientific point of view.

Until now, there are few reports about this syndrome, especially current ones, corroborating with those already existing and showing other forms of successful treatment, such as this report, which shows the use of a skin lightening lotion to have good results.

## REFERENCES

1. Dermatology Information System. Eritema discrômico persistente. Disponível em: <http://www.dermis.net/dermisroot/pt/42974/diagnose.htm> (acesso em 02/05/2017).
2. Filho FB, Santos MVPQ, Carvalho FNMP, et al. Dermatose cinzenta associada com uso oral de antidepressivo. Soc. Port. Dermatol. Venereol 2013; 71(1):128.
3. Gupta M. Erythema dyschromicum perstans. F. A. C. Dermatol. 2009. Disponível em: <https://www.dermnetnz.org/topics/erythema-dyschromicum-perstans>. (acesso: 02/05/2017)
4. Cherobin ACFP, Oliveira FO, B IGR, Vale ECS. Case for diagnosis. An. Bras. Dermatol 2012; 87(1):151-152.
5. Metin A, Calka O, Ugras S. Lichen planopilaris coexisting with erythema dyschromicumperstans. Br J Dermatol 2001; 145(3):522-3.
6. Ramirez OC, Lopez Lino DG. Estado actual de la dermatosis cenicienta. Med Cut ILA 1984; 12:11-18.
7. Torrelo A, Zaballos P, Colmenero I, Mediero IG, Prada I, Zambrano A. Erythema dyschromicum perstans in children: a report of 14 cases. J Eur Acad Dermatol Venereol 2005; 19(4):422-6.
8. Numata T, Harada K, Tsuboi R. Erythema Dyschromicum Perstans: Identical to Ashy Dermatitis or Not?. Case Rep Dermatol 2015; (7):146-150. Tokyo, Japan.
9. Larrea MVP, Chambi OCT. Eritema Discrômico perstans. Reporte de um caso. Rev. Bol. Dermatol 2015; 5(8):44-47.
10. López-Bárceñas A, Contreras-Ruíz J, Carrillo-Correa M, et al. Dermatosis cenicienta (Eritema discrômico perstans). Med Cutan Iber Lat Am 2005; 33(3):97-102.
11. Acar MCR, Garibay RA, Granilla RM. Eritema discrômico perstans. Rev Cent Dermatol Pascua 2012; 21(1).

12. Garais JA, Landau DA, Garay IS, Kurpis M, Lascano AR. Eritema discrômico perstans: a propósito de tres caso. Arch. Argent. Dermatol 2016; 66(6):164-168.