Lichen planus pigmentosus-like ashy dermatosis

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Abstract

Ashy dermatosis, also known as erythema dyschromicum perstans, is an idiopathic dermal melanosis of unknown etiology. We here describe an unusual case of 63-year-old Caucasian male with ashy dermatosis and skin lesion of lichen pigmentosus-like. No treatment was tried because the lesions were totally asymptomatic. After a control, three months later, all lesions had cleared up. This case is of interest because it proves the existence of ashy dermatosis with clinical aspect lichen planus pigmentosus-like. This is the first case in the literature of lichen planus pigmentosus-like ashy dermatosis confirming the view that ashy dermatosis is a variant of lichen planus without the typically band-like infiltrate and Max Joseph spaces.

Introduction

Ashy dermatosis, also known as erythema dyschromicum perstans, is an idiopathic dermal melanosis of unknown etiology, but probably with an immunologic basis. Both sexes are affected with predilection for women. Ashy dermatosis was first described by Ramirez in El Salvador in 1957. It is characterized by asymmetric blue-grey pigment patches with or without erythematous borders most commonly located on the face, neck, trunk and upper limbs, but can affect any region of the body. Ashy dermatosis typically occurs in the second decade of life and generally affects subjects with type IV skin; in fact, it has been described mainly in patients from tropical areas of Central and South America.

The diagnosis is clinical and confirmed by histopathologic findings. No treatment of choice is presently available. A number of treatment modalities have been attempted, but all with uncertain responses.²³

Case Report

A 63-year-old Caucasian male with fototype III was admitted to our Department of Dermatology because of irregular, oval or round dark-brown macules with central resolution symmetrically appeared in both armpits. These lesions, about 0.5-3 cm in size, were asymptomatic. The skin around the armpit was red by initial exposure to the sun (Figure 1). Moreover classic gray-blue macules were present on the lumbar region with a size of 0.6-2 cm (Figure 2). Mucosal surfaces had not been involved. The patient did not use antiperspirants or deodorants.

Concomitant diseases were type 2 diabetes, dyslipidemia, hypertension, coronary ischemic disease with two angioplasties, supra-ventricular extrasystoles, obstructive arteriopathy with intermittent claudication. The patient was in treatment with bisoprolol fumarate (1,25 mg/day), acetylsalicylic acid (100 mg/day), metformin (5 mg + 500 mg/day), dipeptidylpeptidase4 inhibitor (50 mg×2/day), irbesartan (150 mg/day), and pantoprazole (20 mg/day). Laboratory examinations, except glyceremia, glycosylated hemoglobin, cholesterol and triglycerides, were within normal values. A skin biopsy of a lesion from right armpit was performed and histology was suggestive for ashy dermatosis (Figure 3).

No treatment was tried because the lesions were totally asymptomatic. On the contrary, the basic treatment for internal disorders had not been changed. At a control, three months later, all lesions had cleared up (Figures 4 and 5).

The patient recovered without discontinuation of exposure to the sun, also the following summer after the sun exposure has not been resubmitted to the skin disease.

Discussion

Ashy dermatosis is a relatively rare skin disease, included in the group of acquired idiopathic hypermelanosis.

The etiology of the disease is not known though it has been associated with the ingestion of ammonium nitrate, exposure to environmental contaminants, pollutants, worm infestation, endocrinopathy (hypothyroidism, diabetes mellitus), atopy, dyslipidemia. A number of immunopathological studies of active lesions have shown that ashy dermatosis may involve immune mediation. It has been postulated that damage to melanocytes and basal layer keratinocytes results from an abnormal immune response to antigens.

The drugs taken by our patient for the underlying conditions have never been suspended or changed until healed, so can not be...
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responsible for the ashy dermatosis.

The histopathology of ashy dermatosis is not pathognomonic. The active lesions show vac-
uolar degeneration of the basal cells, and pig-
mentary incontinence with many melano-
phages in the upper dermis. Dermal blood ves-
sels are surrounded by an infiltrate of lympho-
cytes and histiocytes. In the residual macules, the incontinence of pigment predominates,
whereas the cellular infiltrate and vacuolar
degeneration of the basal cell layer may range
from minimal to intense.

Differential diagnosis includes lichen planus
pigmentosus, the pigmented macules of the late
pinta, post-inflammatory pigmentation, figural
erthemas, pityriasis rosea, multiple fixed drug
eruption, hemochromatosis, Addison’s disease,
melasma, leprosy, idiopathic eruptive macular
pigmentation, macular amiloidosis, confluent
and reticulad papillomatosis of Gougerot and
Carteaud. The most frequent cause of confusion
and controversy is with lichen planus pig-
mentosus, which is characterized by hyperpigmented
dark-brown macules with a non-characteristic
distribution over predominates in exposed
areas and flexural folds. Its course is character-
ized by exacerbations and remissions, occasion-
ally accompanied by pruritus.3,5 In both lichen
planus and ashy dermatosis, there are melano-
phages and vacuolization of the base-
ment membrane zone (BMZ). Max-Joseph
spaces, although not observed in all cases of
lichen planus, are absent in ashy dermatosis. In
ashy dermatosis a perivascular infiltrate is
often present, in contrast with the typically
band-like infiltrate in lichen planus. The
immunopathology of ashy dermatosis and
lichen planus are similar including populations
of helper/inducer (CD4+), cytotoxic (CD8+) T
cells and epidermal keratinocytes expressing
HLA-DR+. Opinions vary about whether ashy
dermatosis is an abortive form of lichen planus
or a distinct entity.6-8

The our case showed axillary lesions with
typical clinical appearance of lichen planus pig-
mentosum but with ashy dermatosis suggestive
histological examination, because it lacks the
typical band-like infiltrate and the Max Joseph-
spaces. The diagnosis is further confirmed by
the coexistence of lesions in the lumbar region
with a typical clinical appearance of ashy der-
matosis.

This case is of interest because it prove the
existence of ashy dermatosis with clinical
aspect evoking lichen planus pigmentosus.

This is the first case in the literature of
lichen planus pigmentosus-like ashy dermato-
sis confirming the view that ashy dermatosis is
a variant of lichen planus without the typically
band-like infiltrate and Max Joseph spaces.

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