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Melanomas and Basal Cell Carcinomas in a Patient With Parkinson Disease

Melanomas y carcinomas basocelulares en un paciente con enfermedad de parkinson

to the Editor:

Recent studies have detected an increased risk of melanoma in patients with Parkinson disease. The majority of these studies agree that there is a 2-fold increase in the risk of melanoma in patients with idiopathic Parkinson disease, and found a 20% increase in the risk of nonmelanoma skin cancer,[1,2] even in patients who had still not developed the disease, that is, they found a positive association between Parkinson disease and melanoma.[3] A common etiological factor could exist that leads to the destruction of the substantia nigra and the malignant transformation of skin melanocytes.

It is believed that the genetic determinants of idiopathic Parkinson disease increase susceptibility of the skin to UV radiation.[1]

Based on the existence of a common metabolic pathway for the synthesis of melanin and dopamine, it has been suggested in the medical literature that treatment with levodopa in patients with Parkinson disease increases the risk of melanoma and nonmelanoma skin cancer.[1-7]

Levodopa is an amino acid that is not usually present in cell proteins. However, in vitro studies have shown that it is incorporated into cell lines derived from different melanomas.[3]

We present the case of a 42-year-old man, with a 10-year history of Parkinson disease treated with levodopa. In May 2005, he underwent excision of a melanoma on the left flank (Figure 1); histologically the tumor was Clark level II and had a Breslow depth of 0.5 mm, with no ulceration and no areas of regression. The study of extension was negative. The patient received no coadjuvant treatment.

In February 2008, the patient was referred from the oncology department for the recent appearance of multiple squamous erythematous plaques with pearly borders on the back and on the extensor surfaces of both arms (Figure 2). On physical examination, the patient also presented an atypical pigmented lesion on the right flank. Histological study of the lesions on the back confirmed that they were superficial basal cell carcinomas. The pigmented lesion was reported as melanoma, Clark level V and with a Breslow depth of 3.8 mm.

The second melanoma was surgically excised. The study of extension was negative. Photodynamic therapy was given for the basal cell carcinomas, with a good outcome.

The suspicion that levodopa could increase the risk of melanoma has been suggested in a number of clinical trials

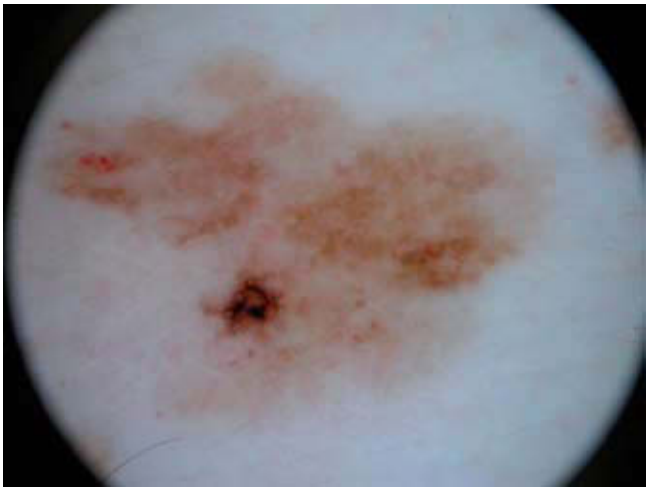

Figure 1 Dermoscopic image of the first melanoma.

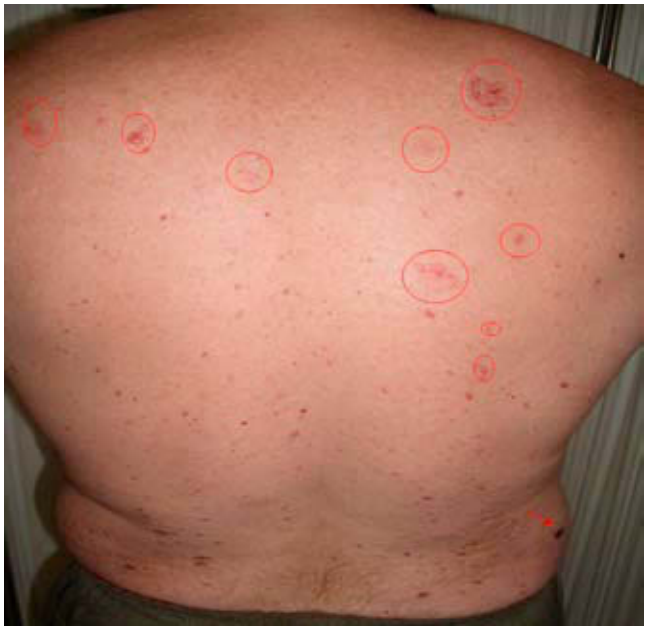

Figure 2 Multiple basal cell carcinomas on the back (circles). Melanoma on the right flank (arrow).

in patients with Parkinson disease treated with this drug, but there is no evidence that its use increases the risk of melanoma or its progression.[1]

In conclusion, we would like to draw attention to the importance of using a high level of sun protection and of referring these patients to a dermatologist if any pigmented lesion develops.

Conflicts of Interest

The authors declare no conflicts of interest.

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Unilateral Focal Dermal Hypoplasia

Hipoplasia dérmica focal unilateral

to the Editor:

Focal dermal hypoplasia (FDH) is a rare genodermatosis characterized by specific skin manifestations such as hyperpigmentation and hypopigmentation, atrophy and telangiectasia with cribriform or linear distribution, following the Blaschko lines.

The disease is X-linked dominant due to the predominance in women and the frequent history of aborted and stillborn male fetuses. It is thought that the few cases reported in men are due to somatic mosaicism, mutations in one sister chromatid, or new mutations.[1]

In the initial stages of embryogenesis, 1 of the 2 X chromosomes in each somatic cell becomes inactivated and forms the sex chromatin (lyonization). This phenomenon is random and permanent and gives rise to 2 functionally different cell populations (functional mosaicism).[2]

In X-linked dominant diseases, affected women present different clinical manifestations because lyonization may give rise to 3 patterns of functional mosaicism: following the Blaschko lines, in a lateralization pattern, or in a checkerboard pattern.[3]

FDH is an X-linked dominant disease that is fatal in males and in which lyonization usually manifests along the Blaschko lines.

We report the case of a neonate with skin manifestations limited to one side of the body, who 2 years later, developed minimal lesions on the contralateral side.

Our case is probably due to the lateralization pattern of lyonization. We found only 3 similar cases of unilateral FDH in a review of the literature.[4-6]

We describe the case of a 20-month-old girl who, since birth, had presented atrophic scarring, with telangiectasia, hyperpigmentation, and hypopigmentation, affecting the left axilla, the left side of the torso, and the lower left limb, following the Blaschko lines (Figure 1). The patient presented a cribriform atrophic plaque on the left side of the nasal pyramid (Figure 2).

There was no relevant family history and the mother had no history of abortion.

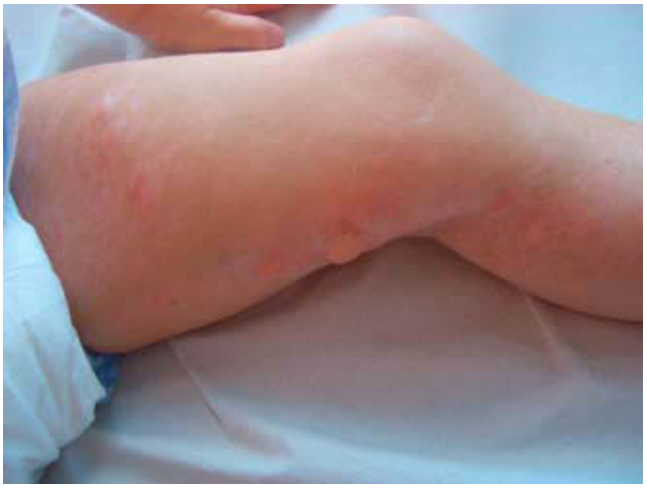

Figure 1 Atrophic linear lesions following the Blaschko lines, affecting the left side of the body.