Congenital vitiligo: A case observed in the cohort of HIV-exposed infants in Bobo-Dioulasso, Burkina Faso

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Abstract

Vitiligo is a dermatological disease; its exact prevalence is unknown among the paediatric population. We are reporting a case of vitiligo at birth for the first time in Burkina Faso, in the Teaching Hospital Souro Sanou of Bobo-Dioulasso, Paediatric Department. He is a male child, born from HIV-1 positive parents; we received him when he was 2 months to be followed in connection with the prevention of mother-to-child transmission. He showed achromic lesions on the skin and on skin appendages at birth. In addition to congenital vitiligo we mentioned, several diagnostic hypotheses were discussed. No treatment was decided to face these skin lesions given the very young age of the patient. Psychological support is planned in the long run.

Introduction

Vitiligo is an acquired depigmentation disease that affects 1-2% of the general population without any racial, sexual, or regional predominance.[1] The exact prevalence in the paediatric population is unknown.[2] In almost half of the patients, it starts before 18 years of age and congenital forms are uncommon.[3] Although aetiology of the disease is unknown, there are several theories including autoimmune and neurologic mechanisms, genetic factors, the role of oxidative stress or toxic metabolites and lack of melanocyte growth factor.[3] There are a few studies that assess congenital forms.[4] However, the existence of these congenital forms is still controversial.[2] We are reporting in this study a case of vitiligo at birth from Burkina Faso in the Paediatric Department of Souro Sanou Teaching Hospital, in Bobo-Dioulasso. The case will be presented with regard to the differential diagnosis.

Case Report

Description

SM, a male infant, born on 27th September 2013, was received in the Paediatric Department in 2013 at the age of 2 months to be followed in connection with the prevention of mother-to-child transmission (PMTCT). In fact he was born from HIV1 mother and father who were under antiretroviral therapy (ART) since 2005. At registration, SM was reported to have skin and appendage lesions since his birth (Figure 1).

On the skin we noted achromic plates with irregular contours but that could be well seen with rounded zones normally pigmented in the centre and whose surface was normal to the touch. No desquamation or sensitivity disorders were recorded. These anomalies were observed on: i) thoracic and abdominal levels where the plate was roughly triangular, formed by the two nipples and the umbilicus measuring approximately 10×15 cm; ii) the left knee and both arms; iii) an area from the left nostril to the upper half-nostril; iv) concerning the appendages, there was a depigmented front lock of hair and the surface was about 2 cm^2.

Ophthalmological examination noted macroscopically: i) partial achromia on the left eyebrow; ii) the cornea was clear, an anterior chamber deep and free of cells, a diffuse iris achromia leading to a white iris. The lens was transparent and the ocular pressure was normal in both eyes.

The fundus examination revealed a diffuse atrophy of the retinal epithelium pigment while the optic disc had a normal aspect.

A biochemical profile was conducted and showed normal blood sugar. HIV-PCR made during the registration has become negative. SM received no treatment for his skin and appendage lesions.

Antecedents

SM was born from a term pregnancy by caesarean section due to foetal distress and he was hospitalized within few hours after his birth in the neonatal department because of mother-foetus infection with concept of brain distress but the germ has not been identified. He was declared cured after 14 days. His relatives denied any personal or family history of hypopigmentation.

The diagnosis was: congenital vitiligo.

This was clinically made basing on the classic cutaneous and appendage lesions. No additional examination such as skin biopsy was performed to make this diagnosis.

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Contributions: MB carried out the clinical evaluation and was the major contributor in writing the manuscript; JWD performed the ocular examination; ABIO carried out the clinical evaluation; BN performed the skin examination.

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Evolution

When he was 2 years old we noted the same skin and eye lesions. Blood sugar was normal; rapid HIV test was negative.

The child left the cohort of HIV-exposed infants but was quarterly monitored in the department for vitiligo. Monitoring in the eye clinic was set once quarterly.

Discussion

Vitiligo at birth is a very rare phenomenon.[4] Only Chandra, Kambhampati, Lerner and Nordlund had earlier reported such a case in their series.[4-6] The hypomelanotic with poorly defined borders type could be a good indicator of the actual activity of a vitiligo lesion.[7] In according to Kambhampati,[5] considering the site, center, and progression of the lesion, in the absence of a white forelock and poliosis, the diagnosis of congenital vitiligo was favored in his study. To the best of our information this is the first case of congenital vitiligo reported from Burkina Faso.

Achromic lesions observed at birth, in addition to congenital vitiligo, as well as other diagnostic hypotheses such as vitiligo leprosy, achromic Ito disease (Hypomelanosis of Ito), oculocutaneous albinism (OCA), piebaldism, tuberous sclerosis complex, and nevus depigmentosus could be mentioned. In fact, vitiligo leprosy is a diagnosis that we should sometimes refer to before an achromic lesion. Hypomelanistic blotches, often scaly, are the seat of sensory disturbances (anaesthesia or hypoesthesia),[8] which is not the case of our patient. The lesions in hypomelanosis of Ito tends to follow the contours of Blaschko.[9]

Piebaldism is an uncommon autosomal dominantly inherited congenital pigment anomaly with a white forelock and leukoderma on the frontal scalp, forehead, ventral trunk and extremities.[10] Tuberous sclerosis (tuberous sclerosus) is an autosomal dominant disease characterized by skin manifestations (hypo-melanistic or achromic blotches on the skin, visible from childhood; angiofibromas of the face; grief skin appearance on the bottom of the back; Koenen tumours of the nails), as well as heart, brain and kidney manifestations.

Nevus depigmentosus is a congenital demarcated hypopigmented blotch with a serrated and irregular border. It is commonly present at birth and changes a bit thereafter. Oculocutaneous albinism includes inherited disorders characterized by complete leukoderma or hypopigmented macules on the entire skin, hair and eyes.[10]

We opted for not treating our patient given his young age but especially because of harmful consequences that therapies might have on his health. In general, treatment for many hypopigmented disorders is limited, especially those which have a congenital origin.[9] The primary outcome of various existing methods is recoloring depigmentation plates either by stimulating the proliferation of melanocytes still present (phototherapy, topical treatments such as corticoid therapies) or by performing a melanocyte transplant. In a systematic review, the most commonly used drugs were tacrolimus alone (or combined with clobetasol), pimecrolimus, corticosteroids, and calcipotriol.[11] All these methods may have consequences in the short, medium or long run on the health of the patient. In addition to the fact that no therapy is planned, we have envisaged psychotherapy when the child will become aware of his unsightly lesions.

Conclusions

Vitiligo at birth is very rare. We have been able to make its clinical diagnosis thanks to the classic lesions of our patient. However, many other conditions can be involved and justify a structured diagnostic approach. Psychological support is very important to this patient because of the disfigurement that people often experience because of the social impact.

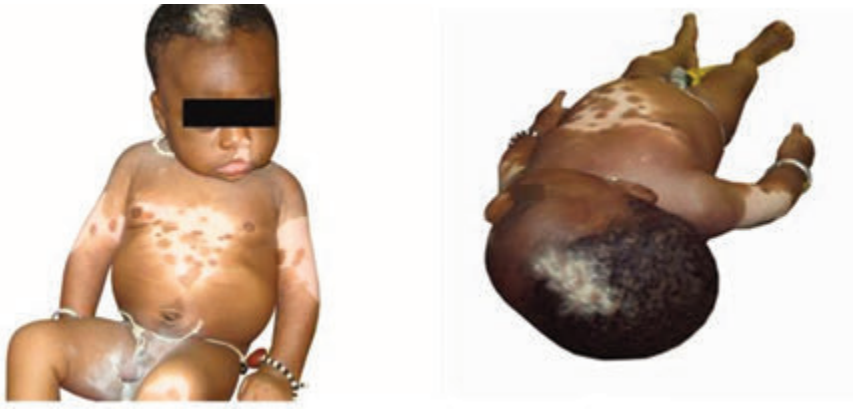

Figure 1. Clinical figures of a 2-month-old boy with congenital vitiligo.

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