

Case Report

Chik Sign: A Clue for Retrospective Diagnosis of Chikungunya

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ABSTRACT

BACKGROUND:

Chikungunya fever is an endemic viral disease spread by arbovirus. It presents as an acute febrile illness with severe debilitating joint pains. Recently, there have been few reports of striking pigmentation over nose, termed as “chik sign” which develops few weeks after chikungunya.

CASE REPORT:

A 40 years old male patient presented to dermatology out patient department of dermatology with complaints of hyper pigmentation over bridge of nose and ala of nose (figure 1), 20 days after an acute febrile illness with joint pain. On examination mucosa and other body sites were normal. He had been diagnosed clinically as a case of dengue fever by the physician on the basis of clinical suspicion. A dermatological diagnosis of 'chik sign' was made which led to the retrospective diagnosis of chikungunya fever.

CONCLUSION

The presence of 'Chik sign' may be a useful marker for retrospective diagnosis of chikungunya fever in resource-limited settings. Knowledge of this is essential amongst clinicians, since it can act as an indicator for an undetected outbreak of chikungunya fever.

KEYWORDS: Chik sign, Hyperpigmentation, Chikungunya

INTRODUCTION

Chikungunya fever is an endemic viral disease spread by arbovirus. It presents as an acute febrile illness with severe debilitating joint pains. Recently, there have been few reports of striking pigmentation over nose, termed as “chik

sign” which develops few weeks after chikungunya. Chik sign,” also known as “brownie nose sign,” is macular hyperpigmentation of the nose and is considered to be a unique cutaneous manifestation of chikungunya fever.

CASE REPORT

A 40 years old male patient presented to dermatology out patient department with complaints of hyperpigmentation over bridge of nose and ala of nose, 20 days after an acute fever with joint pain. On examination mucosa and other body sites were normal. He had been diagnosed as a case of dengue fever by the physician on the basis of clinical suspicion. Dengue serology was negative. Cutaneous manifestations of dengue fever include transient facial erythema, a maculopapular eruption, generalized erythema with islands of normal skin, purpura, and conjunctival or scleral hyperpigmentation. However, cutaneous pigmentation is very rare. A dermatological diagnosis of 'chik sign' (Figure 1) was made which led to the retrospective diagnosis of chikungunya fever.

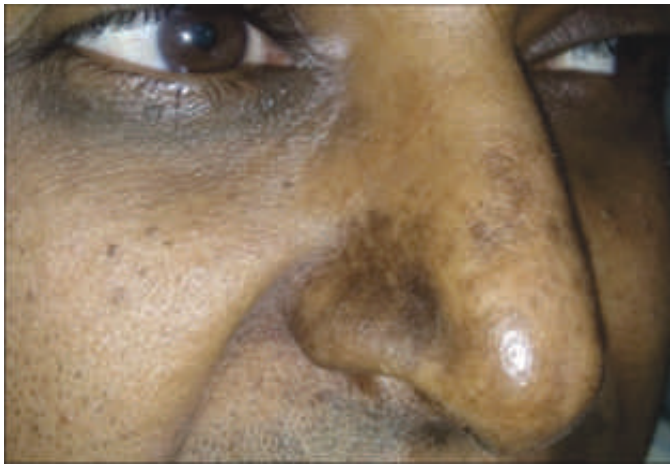


Figure 1: Hyperpigmentation over the bridge and ala of nose (Chick sign)

DISCUSSION

Chikungunya fever is a re-emerging arboviral disease with a myriad of cutaneous manifestations such as morbilliform eruptions, hyperpigmentation, transient nasal erythema, vesiculobullous eruption, aphthous ulcers, lichenoid papules, purpura, and vasculitic ulcers. Flagellate pigmentation, as well as urticaria-like and erythemamultiforme-like lesions, has also been reported, thus mimicking several conditions. In this patient, other causes of cutaneous hyperpigmentation including Addison's disease, Wilson's disease, hemochromatosis, vitamin B12 deficiency, nonsteroidal anti-inflammatory drugs, antimalarials, amiodarone, cytotoxic drugs, and heavy metals were directly, or indirectly, ruled out. In chikungunya, hyperpigmentation is due to increased intraepidermal melanin retention triggered by the virus.

Histopathologically, increased basal pigmentation, pigmentary incontinence, and dermal melanophages with perivascular infiltrate are seen.

We hypothesize similar findings in our case, but biopsy was not done because patient refused. The findings here resembled the chik sign.

CONCLUSION

The presence of 'Chik sign' may be a useful marker for retrospective diagnosis of chikungunya fever in resource-limited settings. Knowledge of this is essential amongst clinicians, since it can act as an indicator for an undetected outbreak of chikungunya fever.

CONFLICT OF INTEREST: None

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