

Case Report

White halo around a congenital melanocytic naevus

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ABSTRACT

This is a case report of Sutton nevus/ Halo naevus/ leukoderma acquisitum centrifugum in a young boy around congenital melanocytic naevus without any associated vitiligo. Halo naevi occur in 1% of the white population. The prevalence is higher in patients with Turner syndrome. It can occur at any age but frequently occurs in a young person. It can be associated with vitiligo and turner syndrome. Postulated pathogenesis is destruction of the melanocytes by cytotoxic T cells. There is frequently lymphocytic infiltration around the naevus in the histopathological examination, and ultrastructurally we can see cytotoxic changes in the naevus cells. It is mainly seen around the acquired congenital naevus but can also occur around spitz naevi, neurofibroma, primary or secondary malignant melanoma. 50% Sutton naevus regress in months to years. Usually, no treatment is required unless, when in doubt, you can do an excision biopsy. Our patient was managed conservatively and followed every six months. This case is being reported because of the condition's rarity and for learning purposes.

Keywords: Halo naevus, Sutton naevus, Depigmented rim, Leukoderma acquistum centrifugum, Turner syndrome, Vitiligo

INTRODUCTION

Halo naevus also known as Sutton naevus or leukoderma acquistum centrifugum, naevus depigmentosa centrifugum, represents pigmented naevus surrounded by a depigmented halo. Mostly seen in children and young adults.¹ The naevus can be almost of any type and rarely can occur around a melanoma.² Halo naevus progresses to several clinical stages. The early lesion is usually a brown naevus with a halo of depigmentation surrounding it. In few months the naevus may lose color and appear pink with surrounding depigmentation. Slowly the naevus disappears and leaving a circular area of depigmentation. Eventually this area may get re-pigmented, leaving no trace of the naevus.

CASE REPORT

9-year-old boy presented to us with a history of hypopigmentation around the nevus of 6 weeks duration. There was no associated itching or pain. The nevus was present since birth. On examination, there was a single well defined melanocytic naevus of 0.4×0.3 cm surrounded by well-defined depigmented macule of 1.0×0.5 (Figure 1). There was no hypopigmented macule else were in the body at the time of presentation.

DISCUSSION

Halo naevus (Sutton naevus/ leukoderma acquisitum centrifugum) is the development of a circle of halo of hypomelanosis around a cutaneous tumour.¹ This tumour

is usually a benign melanocytic naevus but can be blue naevi, Spitz naevi, neurofibroma, primary or secondary malignant melanoma.² Halo naevus is seen in the 1 % white population.¹ Halo naevus can be seen at any age but is more common at a young age. In a study conducted by Weyant et al 57% of cases were seen in adolescence and young adults.¹ Congenital melanocytic naevi are present at birth in 1.6- 0.6% of new-borns.



Figure 1: Melanocytic naevus surrounded by a depigmented halo.

Halo naevi occur more frequently in patients with vitiligo.³ A clinical and immunological association has been described between malignant melanoma and halo nevi.⁴ In a study done by Brazzelli et al, the prevalence of halo nevi was 18% in patients with Turner syndrome.⁵

Most halo naevi are compound naevus, although can occur in both dermal or junctional nevoid patterns. Both congenital and acquired naevus can be affected but are more common in acquired naevus.

It has been thought that halo formation occurs because of the destruction of melanocytes by the cytotoxic T cells. In histopathological examination, there is frequently lymphocytic infiltration of the naevus and ultra-structurally the naevus cells show cytotoxic changes. Melanocytes are absent in the depigmented halo, Langerhans cells and melanophages can be present in the dermis.

Half of the Sutton nevi regresses in months to years (2.9-14.5 years).⁶ Normally no treatment is required, but when in doubt of the nature of the nevi excision of the nevi might be required. Awad et al, demonstrated that excision of Sutton's nevus with combined dermabrasion and Thiersch grafting followed by phototherapy showed good response aesthetically for resistant halo nevi.⁷

Limitation of the study

It is a single case report.

CONCLUSION

This is a case report of Halo naevus/ Sutton naevus/ leukoderma acquisitum centrifugum in congenital melanocytic nevus in a young boy. The learning points are when a patient has halo naevus always should look out for associations like vitiligo, turner syndrome and malignant melanoma. Before treating conservatively always should rule out red flags like asymmetry, colour variability, irregular border or surface.

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