

Chapter 24

Non-segmental Vitiligo in 10 Years Old Child



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A 10 years old boy patient was referred to outpatient clinic of Dermatology and Venereology Dr. M. Djamil Hospital Padang with chief complaint milky white macules that does not feel itchy and numbness under the right eyelid, bridge of the nose, right nostril, under the right nostril, above the upper lip, above the corner of the right upper lip since 2 weeks ago (Fig. 24.1).

Initially, ± 5 months ago, milky white macules that did not feel itchy and numbness appeared as big as corn kernels on the upper lip. The previous appearance of white macules was not preceded by red patches. The milky white macules was increased and got wider to the upper lip, under the right eyelid, under the right nostril, bridge of the right nose, and above the corner of the right lip. The patient likes to scratch the milky white macules under the right nostril, so that the milky white macules under the right nostril is getting wider in 2 weeks. The patient likes to play ball with his friends under the sun. The patient does not use sunscreen or a hat to protect his face. None of the family members experienced milky white patches that did not itch and did not feel numb like the patient.

On examination, we found milky white macules that do not feel itchy and numbness under the right eyelid, bridge of the nose, right nostril, under the right nostril, above the upper lip, above the corner of the right upper lip. The Koebner phenomenon was positive. The patient's skin type according to Fitzpatrick was type IV, the VASI score was 0.5 and the DLQI score was 2 (small effect). On examination of the

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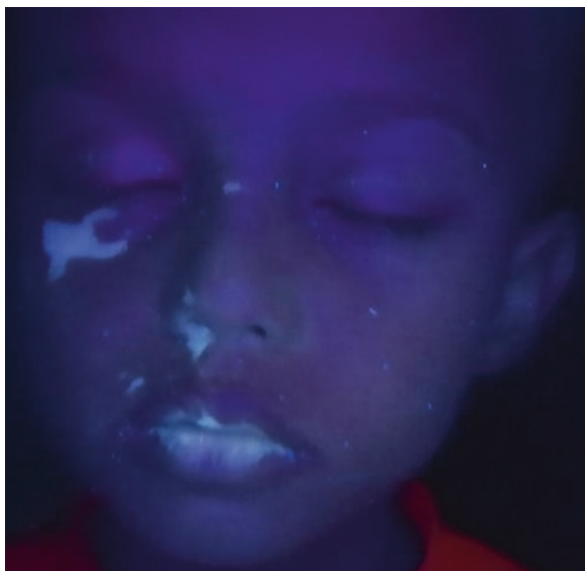
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Fig. 24.1 Milky white patches macules under the right eyelid, bridge of the nose, right nostril, under the right nostril, above the upper lip, above the corner of the right upper lip

Fig. 24.2 There was a milky white fluorescence under the right eyelid, the bridge of the nose, the right nostril, under the right nostril, above the upper lip, and above the corner of the right upper lip



wood lamp, there was a milky white fluorescence under the right eyelid, the bridge of the nose, the right nostril, under the right nostril, above the upper lip, and above the corner of the right upper lip (Fig. 24.2). On dermoscopy, we found milky white macules with defined borders, perifollicular depigmentation, and leukotrichia (dark circles) (Fig. 24.3). On laboratory examination, the results obtained T3 2.29 nmol/L, T4 112 nmol/L, TSH 1.17 μ IU/mL, and ANA profile was negative.

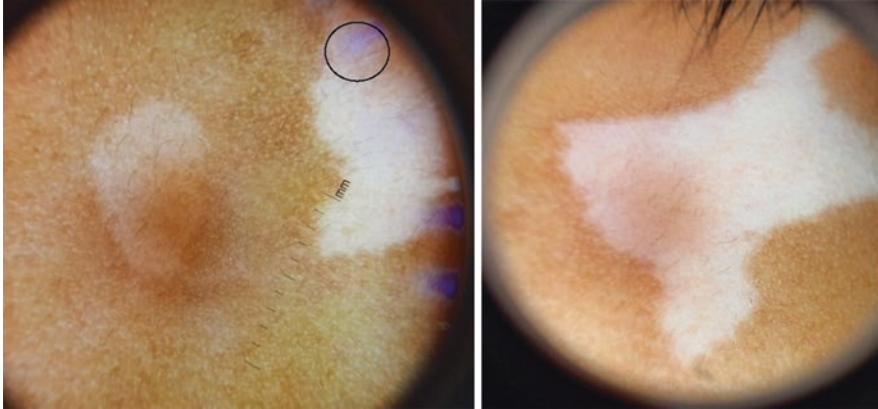


Fig. 24.3 There were milky white macules with defined borders, perifollicular depigmentation, and leukotrichia (dark circles)

Based on the case description and photograph, what is your diagnosis?

1. Non-segmental vitiligo
2. Post traumatic hypopigmentation

Based on medical history, physical examination, wood's lamp, and dermoscopy, diagnosis for this patient is Non-segmental vitiligo.

Treatment: we started mometasone furoate cream 0.1% twice daily on milky white macules for 3 months and wore sunscreen with SPF 30, applied 30 min before going out or exposed to the sun. Patients after using mometasone furoate cream 0.1% for 3 months still have not seen any improvement. In accordance with the algorithm of vitiligo management in children, the patient was given tacrolimus ointment 0.1% for 6 months.

Discussion

Vitiligo is characterized by asymptomatic milky white macules, possibly localized or generalized. Vitiligo in childhood is categorized as segmental and non-segmental. Segmental vitiligo (SV) is a depigmented macule along a dermatomal or quasi dermatomal pattern, without crossing the midline. Non-segmental vitiligo includes local and generalized variants [1].

Various therapeutic modalities are available for the treatment of vitiligo. However, all of these therapeutic modalities cannot be used in children. The modalities of vitiligo therapy in children consist of medical therapy (topical and systemic therapy), phototherapy, surgical therapy, cosmetic camouflage and depigmentation. Moderate potent topical corticosteroids are first-line therapy for children with localized vitiligo. Although high potency steroids are more effective in vitiligo, they are not recommended for use in children [2].

The use of sunscreen is also recommended for children who have vitiligo. Sunscreen aims to prevent sunburn, reduce sun damage, and prevent Köbner's phenomenon. Sunscreen can also reduce unaffected skin tone and discoloration of skin with depigmented lesions [3]. It is recommended that children use sunscreen after 1 year of age and with a sun protect factor (SPF) of at least 15 [4].

Corticosteroids can also cause local side effects such as striae, atrophy, telangiectasia and contact dermatitis. To reduce these side effects, in children, non-fluorinated corticosteroids with moderate potency can be used and the same efficacy for successful therapy. Corticosteroids can also be combined with other therapies such as topical calcipotriol. Combination of class potent or mid potency topical corticosteroid with calcipotriol showed 87% success rate and 95% repigmentation rate. The efficacy and safety of this combination are better than single therapy. To monitor the therapeutic response used an examination with Wood's lamp. Follow-up is done every 1–2 months. The use of topical corticosteroids in and around the eyelid must be monitored carefully, because it can cause increased intraocular pressure and cause glaucoma [5].

Key Points

- Vitiligo is a chronic pigmentation disorder characterized by the appearance of milky white macules on the skin due to progressive loss of epidermal melanocytes, it can occur in childhood.
- Various therapeutic modalities are available for the treatment of vitiligo. However, all of these therapeutic modalities cannot be used in children. In children, vitiligo therapy is usually based on the extent of the lesion.

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