

A Paler Patch of Skin

Although health risks are uncommon with hypopigmentation, disfigurement and major psychologic effects are not. Can you find the answer to these cases of lost pigment?

Match the diagnosis to the photo by letter

- a. Morphea
- b. Poliosis
- c. Progressive macular hypomelanosis
- d. Pityriasis alba

1. A 14-year-old boy presents for evaluation of loss of pigment in the hair and the adjacent neck skin, present since shortly after birth. His history includes tuberous sclerosis. On examination, you note a complete loss of pigment in the posterior scalp on the patient's left side, along with total loss of color in the skin on the adjacent part of the neck. Additional inspection reveals dart-shaped hypopigmented macules on the patient's trunk, fleshy 1- to 3-mm papules clustered about the midface, and periungual fibromatous papules around several toenails.



3. For 5 years, a 12-year-old boy has had an expanding, asymptomatic lesion on his left medial thigh and knee. Examination reveals a 20 x 10-cm "lesion" with a central area of depression and a cicatricial fusiform plaque. The entire area is firm to the touch and brownish blue, with a sclerotic look and feel. The overlying skin is smooth, and the venous plexus can be easily traced. Punch biopsy of the wall of the depressed area show thickening and homogenization of collagen bundles concentrated in the lower reticular dermis.



2. A 16-year-old African-American girl is evaluated for skin changes affecting both arms: small, round, slightly scaly, 2- to 3-cm patches on the triceps, antecubitals, and deltoids. The changes manifested in early spring and worsened with the arrival of summer. The patient's history includes eczema, extensive atopy manifesting with seasonal allergies, and childhood asthma. The condition has been previously diagnosed as vitiligo and as fungal infection. Nystatin cream and clotrimazole cream have had no effect.



4. A 40-year-old man presents with asymptomatic, hypopigmented macules that manifested on his forehead 2 years ago and have since spread to his trunk, arms, and legs. The patient denies any prior rash, injury, or hyperpigmentation associated with the distribution of the lesions. A rapid plasma reagin test to rule out secondary syphilis is nonreactive.

ANSWERS



Diagnosis: Also known as *piebaldism*, **poliosis**, which is often idiopathic, can be seen in a number of conditions besides tuberous sclerosis and vitiligo; these include halo nevi of the scalp, alopecia areata (as hair

regrows), and Waardenburg syndrome. As seen in this case, it can appear early in life as an indicator of tuberous sclerosis, particularly when coupled with involvement of adjacent dermatomal skin. No permanent treatment exists for this problem.

For more information, see “What is this long-standing loss of pigment?” *Clinician Reviews*. 2009;19(4):26. <https://bit.ly/2VR2Ucc>



Diagnosis: This form of hypopigmentation is **pityriasis alba**, in which areas of eczema don’t tan at all while the surrounding skin darkens with sun exposure. This phenomenon is so common in dermatology clinics

that it’s a rare day when we *don’t* see it. The lateral aspects of the arms are often affected (sparing the sun-protected medial aspects), as are the sides of the face and the posterior neck. The contrast is striking, especially on those with darker skin.

For more information, see “Wanna see my not-tan lines?” *Clinician Reviews*. March 23, 2017. <https://bit.ly/2v8LvQt>



Diagnosis: Based on the results of the biopsy, it seems clear that the diagnosis is **morphea**. This case is a perfect example of an established maxim of dermatology: One seldom diagnoses what one has never heard

of. The reported incidence of morphea is 25 cases per 1 million Americans, but it is a common enough complaint in dermatology practices. Although the precise cause is unknown, there is general agreement that morphea represents localized dysregulation of collagen synthesis and deposition in the dermis. Morphea takes several clinical forms; the most common is the plaque type, which typically presents as an annular lesion on the trunk or extremity, with the potential to grow to considerable size. Most will stop growing in time, but the discolored “burnt-out” lesion remains, leaving a purplish brown atrophic area.

For more information, see “Common ‘lesion’ leads to rare diagnosis.” *Clinician Reviews*. 2009;19(12):2. <https://bit.ly/2ly09cX>



Diagnosis: A fairly common acquired dyschromia, **progressive macular hypomelanosis (PMH)** is a noninflammatory skin disorder characterized by ill-defined, nummular, hypopigmented, and nonscaly macules. PMH is a diagnosis of exclusion.

Hypopigmented diseases commonly considered in the differential include those caused by fungi and yeasts (eg, tinea versicolor, seborrheic dermatitis), inflammatory skin disorders (eg, pityriasis alba, postinflammatory dyschromia), and mycosis fungoides as well as leprosy.

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