

# Los Angeles Pediatric Society E-Newsletter

## Volume 5 No. 1

## July 2018

### DERMATOLOGY CLINIC

#### What's Your Diagnosis?



#### WHITE TRUNKAL PATCHES IN A TEENAGE BOY

**Tsippora Shainhouse, MD, FAAD, DAAP, FRCPC**  
(Dermatology and Pediatrics)

A 15-year-old, African American male presents to clinic for evaluation of progressive, asymptomatic, hypopigmented, slightly scaly patches on his skin. They began on his upper back and have spread to his shoulders and chest over the summer season, which he does spend swimming and playing sports outdoors. Mom says that she only really sees his body during the summer, when he isn't wearing a shirt. She does think that he had a similar rash last summer, but does not recall him having similar patches at birth or in early childhood. He doesn't have a history of eczema or sensitive skin, he has no similar patches in his scalp or along his hairline and eyebrows, and he feels well. He has no personal or family history of autoimmune disease.

What is Your Diagnosis?

- A) CARP
- B) Tinea Versicolor
- C) Seborrheic Dermatitis
- D) Pityriasis Alba
- E) Vitiligo



Tsippora Shainhouse, MD, FAAD

**ANSWER: B) TINEA VERSICOLOR (TV)** – This is a benign, superficial fungal infection of the skin caused by the lipophilic, dimorphic yeast, *Malassezia sp.* In the round, yeast form, *Malassezia* is a part of the normal skin flora; conversion to the filamentous, hyphal form leads to the inflammatory response and/or enzymatic pigment destruction that appears as the characteristic well-demarcated, thin, scaly pink, hyperpigmented or hypopigmented patches and plaques.

TV is not contagious. Factors triggering it include: heat, humidity, OCP use, steroid use, immunosuppression and oily skin. Because of its affinity for oil, there is a significantly increased incidence of TV during adolescence, when hormones trigger sebum production and provide a more lipid-rich environment for the yeast to grow. And, as such, it develops in a 'seborrhic' (oil gland) distribution, including the chest, back, shoulders, upper arms, neck and face (the face is most common in African American children with TV). It can also be seen on the hypogastric, suprapubic and groin area. It is more common in teens who are physically active. It tends to become most apparent at the end of the summer, because the unaffected surrounding skin tans easily, revealing asymptomatic, discrete hypopigmented patches that are unable to tan. Diagnosis is made clinically based on characteristic rash and 'evoked scale sign' (stretching or scratching skin makes the fine scale more apparent). Diagnosis can be confirmed with microscopic examination of KOH-treated skin scrapings at the bedside, which should demonstrate the 'spaghetti and meatballs' pattern of both yeast hyphae and spores. First-line treatments include topical ketoconazole, selenium sulfide and zinc pyrithione. They are most easily used in the shampoo form, applied to the body as a lotion or wash and left on for up to 10 minutes before rinsing. Use daily for 2-3 weeks. Localized patches can be treated with topical ketoconazole cream for 2-3 weeks. It can take months after treatment is done for the pigment to return. Because this infection tends to recur in susceptible persons, it is advisable to prophylax during peak infection time (summer) by applying the shampoo to the skin once every 1-2 weeks. Extensive cases can be treated with oral fluconazole.

**CONFLUENT and RETICULATED PAPILLOMATOSUS (CARP)** – This is an uncommon skin condition observed in young adults with darker skin types. It usually presents as hyperkeratotic brown papules that coalesce into plaques with a reticulated, well-demarcated periphery. It tends to involve the central trunk (chest, back). It can last for years and is often misdiagnosed as the hyperpigmented version of tinea versicolor, due to its appearance, distribution and persistence. Interestingly, a case series has been reported about hypopigmented CARP masquerading as tinea versicolor. However, CARP will not respond to antifungal therapy alone. It is treated with oral minocycline.

**SEBORRHEIC DERMATITIS** – This is a common, greasy, flaky, sometimes itchy, pink and irritated skin rash that is equivalent to dandruff or cradle cap. While it usually affects the scalp, it can also present in a classic 'seborrhic' (oil gland) distribution, including the eyebrows, perinasal, sideburns, hairline, chest and upper back. In infants, it can also be included in the differential of diaper dermatitis. It is caused by an irritation reaction to non-pathogenic yeast on the skin. Treatment involves removing the cause, ie, killing the yeast (topical anti-yeast shampoos and/or cream for 2-4 weeks), and managing the symptoms (short course of mild topical steroid), if needed.

**PITYRIASIS ALBA** – This refers to hypopigmented, mildly scaly patches with ill-defined borders, that tend to develop on the cheeks, and sometimes the upper extremities of children with sensitive skin types. It is more common in children with a history of eczema. It is not usually itchy, and, similar to hypopigmented tinea versicolor, will be more noticeable when the surrounding skin is tanned in the summer months. It is technically a mild local inflammatory reaction in the skin which incidentally destroys some of the melanin and melanosomes, leaving the skin appearing lighter, but not white. There is no antecedent ‘pink’ stage. It can take years for the condition to resolve and for pigment to recur. Management includes observation, moisturizers and courses of mild topical steroid or calcineurin inhibitors, as needed.

**VITILIGO** – This is an autoimmune condition in which the host attacks normal melanocytes and destroys them, leaving well-demarcated, completely depigmented, chalk-white patches of skin. Sometimes new, active areas appear mildly pink, but they will never have associated scale. Woods lamp confirms depigmentation, and while it is rarely performed, skin biopsy reveals absence of melanocytes. It is asymptomatic. It can develop on any area of skin, but tends to be symmetric and involve the face, hands, chest, axillae, groin and periorificial areas (eyes, nose, mouth, anus, urethra). It favors sites of friction or trauma. It can be localized or generalized and can progress unpredictably with years of remission in between flares. It can be associated with concurrent thyroid disease, so symptomatic patients should have TSH and TPO levels screened. Diabetes mellitus, Addison disease and other autoimmune conditions have also been associated; screening is recommended in patients with suggestive symptoms or a positive family history. Spontaneous repigmentation is rare and response to treatment is slow. Goals of treatment are to halt progression and induce repigmentation, which occurs in a perifollicular pattern. Traditional therapy includes: topical steroids, topical calcineurin inhibitors and narrow-band UVB phototherapy. Autologous skin grafts have been used successfully. Emergent systemic therapies involve the JAK inhibitors, which have demonstrated clinical success, but depigmentation recurs with discontinuation of the medications. UV protection, including daily broad-spectrum sunscreen use, and psychological counselling are integral to managing the patient.

## **FURTHER READING**

Gupta AK, Kogan N, Batra R. Pityriasis Versicolor: A Review of Pharmacological Treatment Options. Expert Opin Pharmacother. 2005;6(2):165-178.

Hudacek KD, Haque MS, Hochberg AL, et al. An Unusual Variant of Confluent and Reticulated Papillomatosis Masquerading as Tinea Versicolor. Arch Dermatol. 2012;148(4):505-508.

Kallini JR, Riaz F, Khachemoune A. Tinea Versicolor in Dark-Skinned Individuals. Int J Dermatol. 2014;53(2):137-41.

Renati S, Cukras A, Bigby M. Pityriasis Versicolor. Br J Dermatol. 2015;350:h1394

***Tsippora Shainhouse, MD, The KidSkin™ Doctor, is a board-certified dermatologist and pediatrician. She is a clinical instructor of Pediatric Dermatology at USC and works in private practice in Los Angeles.***