

treating skin of color

NATIONALLY-RECOGNIZED DERMATOLOGIST
CHARLES E CRUTCHFIELD III MD DISCUSSES
SOME COMMON SKIN DISORDERS
OBSERVED IN SKIN OF COLOR.

Most skin diseases occur in people of all nationalities, regardless of their skin color. Certain problems encountered in the skin are more common in people with different hues of skin, and sometimes a disorder seems more prominent because it affects skin color.

Variations in skin color

Skin color is determined by cells called melanocytes. Melanocytes are specialized cells within the skin that produce a pigment known as melanin. Melanin is produced and stored within special structures, known as melanosomes, contained in the melanocytes. The melanocytes make up only a small percentage of overall skin cells. In fact, only two to three percent of all skin cells are melanocytes. The variation in skin color we see across all people is determined by the type and amount of melanin produced by the melanocytes.

All people essentially have the same number of melanocytes. A recent theory indicates that the differences in skin color are really a reflection of the skin's ability to protect against ultraviolet radiation. Persons living closer to the equator produce more melanin because the ultraviolet radiation is more intense, and groups of people living further away from the equator produce less melanin, resulting in lighter skin color. One reason treating pigmented skin can be somewhat difficult is that traditionally textbooks have

only had black and white photographs. Additionally, many lesions have been described as red, pink, salmon, or fawn-colored. This certainly is true in Caucasian skin; indeed many of the textbooks that were written had this as the majority patient type. However, in tan, brown, or dark-brown skin, inflammation can look grey, copper, or violaceous in color. Additionally, certain conditions will have a slightly different presentation in pigmented skin (see pityriasis rosea).

Post-inflammatory hyperpigmentation and hypopigmentation

Melanocytes are very sensitive cells and can either stop producing color or produce excessive color in cases of inflammation. Normally in children the cells stop producing color (I explain to parents that the cells tend to go to sleep), especially in irritation of the diaper area. It is very common in a child of color to have a very light area of post-inflammatory hypopigmentation. This is where the inflammation of diaper irritation causes the melanocytes to stop producing color, leaving light or white patches. With the appropriate treatment, the color almost always returns to normal within a few weeks. In older patients, inflammation can lead to post-inflammatory hyper-pigmentation. This is most commonly seen in areas where acne blemishes heal, leaving a dark spot behind. These too will fade with time; however, it can be quite persistent.

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Vitiligo

Vitiligo is a skin condition that occurs in all people, but it is most noticeable in patients with tan, brown, or dark-brown skin. I believe that vitiligo is really the end stage of several different disorders. In some disorders, the melanocytes are attacked by the immune system and they die. In other conditions, the melanocytes are pre-programmed to die early. No matter what the cause, ultimately, patches of vitiligo are white patches devoid of melanin. Because these areas lack natural protection, vitiliginous patients must wear sunscreens to prevent ultraviolet radiation exposure and subsequent cancer later in life. In the majority of cases, vitiligo is probably the result of an auto-immune or inflammatory attack on melanocytes. In these cases, topical anti-inflammatories and phototherapy, most notably narrow-band ultraviolet B, tend to be most effective. We have a success rate of approximately 75 percent in our clinic. In the remaining cases, these are probably related to a genetic program in the melanocytes where they die prematurely. Usually with the appropriate treatment, signs of vitiligo can be reversed in one to two months.

Pityriasis alba

Pityriasis alba is a condition where white patches occur on the arms, trunk and, most notably, on the face. This is an extremely common condition seen primarily in adolescent patients of color. It is a result of a very mild irritation and/or eczema leading to post-inflammatory hypopigmentation where the melanocytes temporarily stop producing color. Mild topical anti-inflammatory lotions, gentle cleansing bars, and ultra-moisturizing lotions can be used to treat pityriasis alba. The loss of color in this condition is usually only temporary, and is most notably seen on the cheeks of adolescents.

Dermatosis papulosa nigra

This most commonly occurs in African-American patients. Some people call them 'flesh moles', 'Bill Cosby spots', 'Morgan Freeman spots', and, more recently, 'Condoleezza Rice spots'. It tends to occur slightly more frequently in women than in men. These are tan to brown to black, raised papules that can occur on the forehead, cheeks, and neck. Under the microscope, they resemble other benign growths known as seborrheic keratoses. We use a special surgical technique in our clinic that can achieve excellent results in treating dermatosis papulosa nigra. Indications for treatment can be pain, itching, irritation, and cosmetic reasons.

Acne

When treating persons of color, post-inflammatory hyperpigmentation (brown spots after the acne blemishes have healed) and active acne need to be differentiated. It is



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important to note that when one is treating acne, the brown spots that occur afterwards are only residual effects, not active acne. I usually employ a combination therapy when I am treating acne to achieve optimal results. This usually involves topical treatments, oral treatments, laser treatments and, in persons of color, topical lightening agents that can include retinol, anti-inflammatory agents, and the bleaching agents cogic acid and hydroquinone. I also discuss with patients the difference between active inflammatory, bumps, and the flat, brown spots left behind.

Dry or 'ashy' skin

This is a problem seen in all patients, but when one has tan, brown, or dark-brown skin, dry skin tends to turn silvery white. This phenomenon is often referred to as having 'ashy' skin. I believe the most important component of any skincare program is a gentle, non-detergent cleanser and an ultra-moisturizing lotion. I recommend the lotion be applied immediately after patting the skin dry after a bath or shower. This seals in the moisture achieved from the shower, and the appropriate moisturizing lotion can provide continual moisture and protection throughout the day. Often, two or three days of this program can completely reverse dry or 'ashy' skin.

Keloids

Throughout evolution, our skin has become quite skillful at repairing any sites of injury or damage. Once the integrity of the skin barrier has been interrupted, invaders such as bacteria, fungus, and virus can penetrate the skin and important bodily fluids can leak out. As a result, the skin's repair system is rapid and complete. Cells known as fibroblasts migrate into the area and produce protein to fill in the hole. The major component of the repair product is collagen, and that is what makes up a scar. Unfortunately, in some cases and commonly in African-Americans, the fibroblasts receive the signal to come in and repair the defect; however, they do not get the signal to turn off. As a result, too much collagen is produced and the scar can become thick and hard. When the collagen presses on nearby sensory nerves, the keloidal scar can also produce tenderness, pain, and extreme itching. The difference between hypertrophic and keloidal scar is that hypertrophic scars usually stay right at the site of injury, whereas keloids can actually spread and invade normal surrounding skin. In our clinic, we use an aggressive six-month program to effectively treat keloids. It is one thing to surgically remove a keloid, yet it is another thing to keep it from coming back. Remember, the development of a keloid is a response to injury. By surgically removing a keloid, the skin is being re-injured – and that area has already shown it can form a keloid. We perform regular treatments every two to four

weeks over a six-month period, including anti-inflammatory injections, topical silicone-based preparations, pressure dressings, and laser treatments to prevent the return of keloids.

Acne keloidalis nuchae

This condition is also known as folliculitis keloidalis nuchae, where small, very itchy bumps can occur at the nape of the neck. This is most commonly seen in African-American patients, but to a lesser degree it can affect all patients. It is most commonly seen in men, but can also be seen in women. Many male patients believe this is a result from a barbershop treatment where the barber had unclean clippers. This is quite untrue, and I have seen many cases that develop without any previous haircuts.

One theory is that this condition is a result of a deep fungal infection. However, in my experience, I have performed many biopsies, and analyzed cultures for fungus and special histology stains, but I have not yet identified a fungus infection. I believe this condition is just an anatomic and genetic variant, with itchy bumps developing from very mild irritation in this particular anatomic location.

Smaller bumps can be treated very effectively when treated with a combination of topical and oral anti-inflammatory medication. In many cases, a short course can provide long-term results. Often a surgical approach is required if the lesions are too large. Nevertheless, the condition can be managed quite well.

Pseudofolliculitis barbae

This condition is also known as ‘razor bumps’. Hair is made of a protein called keratin and it can be extremely inflammatory to the skin. It is called ‘pseudo’ folliculitis because the hair can actually come out of the follicular opening and penetrate nearby skin, causing it to look like an inflammation or folliculitis of that pore. However, because it is just nearby the actual follicle it is ‘pseudo’ folliculitis. This is most often seen in persons with curly hair or hair that grows in an oblique angle to the skin. Sometimes, if curly hair is cut extremely close, it never even exits the skin but instead penetrates the sidewall of the follicle (known as transfollicular penetration) or it comes out of the follicle and pokes the skin (known as extrafollicular penetration). The results are the same: the keratin invades the skin, producing a brisk inflammatory reaction that causes itching and the formation of pustules.

When pseudofolliculitis is mild to moderate, many topical treatments can be implemented, including a very mild oatmeal-based shaving cream, and a non-electric razor with a safety guard so the hairs are not cut too short. Shaving after a shower is also recommended – the hair is

hydrated so the final tip is soft as opposed to sharp. In addition, using a soft-bristle toothbrush to make circular motions in the beard area before bedtime can prevent the hair from penetrating as it grows throughout the night. Topical anti-inflammatory aftershave lotions and oral anti-inflammatories can also be used if necessary. In the majority of cases, this can provide satisfactory relief. However, in certain cases where relief is not achieved through these means, the best treatment is to remove the offending agent. In this case, I recommend laser hair removal. Pseudofolliculitis barbae has been a vexing problem throughout history and can even interfere with occupations that require a clean-shaven face such as military officers, peace officers, and firefighters. Thankfully, this condition can be addressed by implementing appropriate treatments and techniques.

Tinea capitis

Tinea capitis, also known as ringworm, is endemic in African-American children. Any child with a scaling, itching scalp should be thoroughly investigated for tinea capitis. One of the clues to this is enlarged lymph nodes in the nape of the neck. I recommend a topical anti-itch/anti-inflammatory lotion in addition to an oral anti-fungal agent. No matter what agent is used, it is important that treatment occurs for at least eight weeks at a somewhat high dose, as advised by a board-certified dermatologist. It is also recommended that all objects that touch the hair, such as combs, barrettes, rubber bands, and pillowcases, be replaced or treated to prevent re-infection. I also advise all members of the household to use an anti-fungal shampoo throughout the treatment period for two months. This is a very common yet easily treatable condition in young children. I believe that as people get older, the milieu of the sebum in the scalp changes, preventing an active infection. However, many adults can be carriers and pass it to their children, who are prone to infection.

Melanonychia striata

This is a condition where brown to black longitudinal bands occur in many, if not all, the fingernails and toenails. This is a common, benign condition that is often seen in multiple family members. However, if one band should occur spontaneously without a family history, this should be evaluated for an underlying mole or melanocytic malignancy.

Voigt or Futch lines

These are lines seen most commonly on the upper arms and sometimes thighs and are normal variations. They were named after a physician and anatomist who first described these near the turn of the century. They are harmless and only reassurance need be given.

Mongolian spots

These are slightly grey, round patches seen on the lower back and buttocks of children of color. These are harmless and represent a failure of migration of melanocytes during fetal development. The vast majority, if not all, of these will resolve by adolescence. A similar process can be seen on the cheeks and the sclerae (whites of the eyes), known as nevus of Ito and nevus of Ota.

Midline hypopigmentation

Often the central chest area can be slightly lighter than other parts of the area, and this too is a normal variation in pigment of the skin.

Pityriasis rosea

Pruritic rosea is a very mild skin eruption that most likely represents a cutaneous skin reaction to a very mild viral infection. In Caucasian skin, oval patches with mild scaling can appear, almost like a spruce-tree pattern on the back. In approximately half, if not more, of all cases, one large lesion known as the 'herald patch' precedes all the other lesions by one to two weeks. In pigmented skin, however, the lesions tend to be more papular and not necessarily flat and oval. Histologically, the condition is the same in all skin but the variation in different skin colors can be confusing when it comes to the diagnosis. Pityriasis rosea usually runs its course in two to six months and is treated with only reassurance unless it is symptomatic. At that point, topical anti-inflammatory lotions and phototherapy can be quite effective.

Lichen nitidus

Lichen nitidus is a common, small papular eruption that can occur on the abdomen of children of color. It can also occur quite extensively involving the legs, arms, and face. Unless the lesions are symptomatic, most children will outgrow these by their adolescent years and they are usually of no consequence. If they are symptomatic, topical anti-inflammatory ointments, creams, and lotions can be used with good results.

Traction alopecia

Hair that is braided tightly can actually produce hair loss in children. This presents in a classic pattern that can be easily detected. If a small child has hair loss, hair care patterns should be reviewed. In addition, if the hair loss is occurring in areas of traction or pressure from braiding, these practices should be modified, and the hair regrowth should occur in a few months. **CBM**



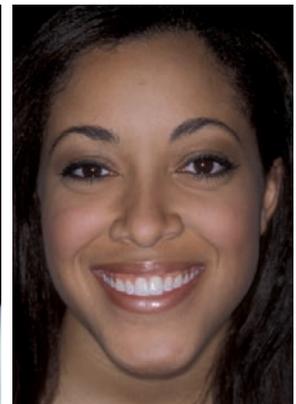
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Dr. Crutchfield is an Associate Professor of Dermatology at the University of Minnesota Medical School and is Medical Director of Crutchfield Dermatology, which is recognized internationally as one of the leading treatment centers for 'skin of color'. For additional information on skin of color, visit www.crutchfelddermatology.com/treatments/ethnicskin.

Some common skin disorders observed in skin of color



Acne with post-inflammatory hyperpigmentation



Keloids



Pseudofolliculitis



Vitiligo



Lichen nitidus on abdomen



Dermatosis papulosa nigra



Voigt/Futcher lines



Mongolian spot



Pityriasis alba



Pityriasis rosea, papular type



Melanonychia striata



Traction alopecia



Tinea capitis



Xerosis (dry 'ashy' skin)



Acne keloidalis nuchae