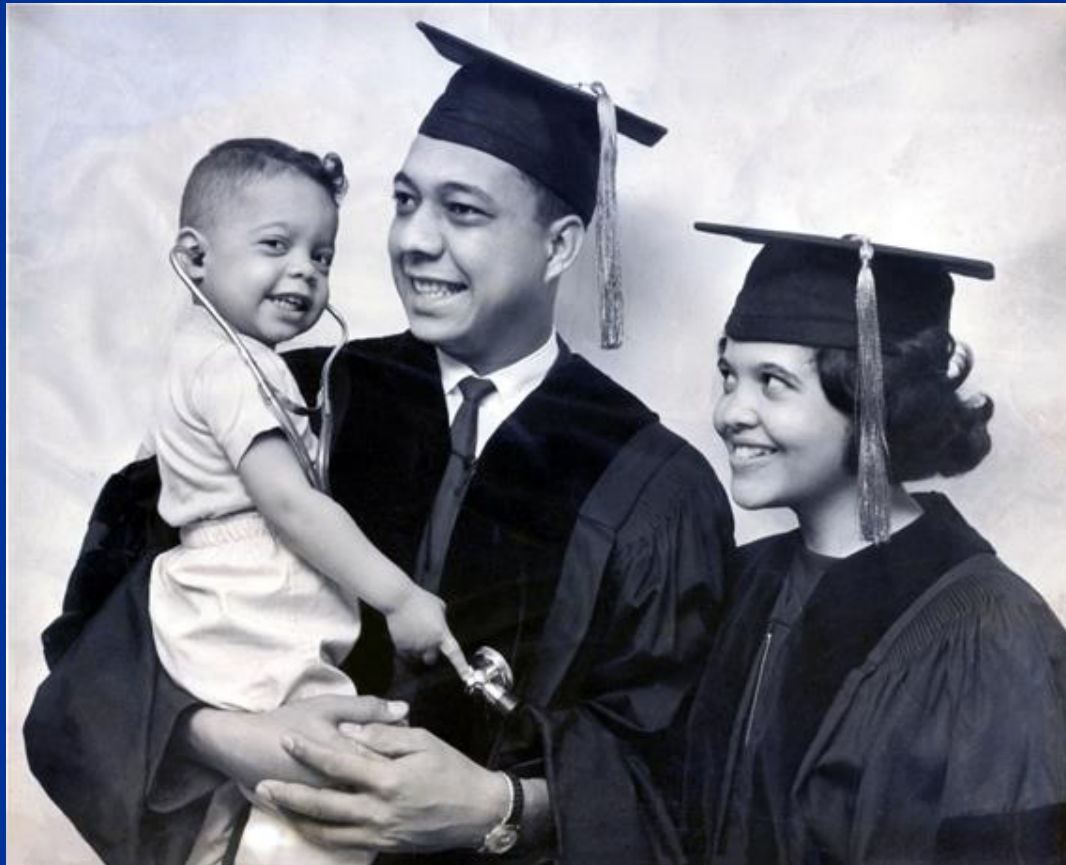


“Skin of Color Treatment Pearls”
Minnesota Academy of Family Physicians

Charles E. Crutchfield III, MD

Clinical Professor of Dermatology
University of Minnesota Medical School



Thank You
For inviting me to speak



KellyK@CrutchfieldDermatology.com

email her for complete transcript



Informal and Relaxed



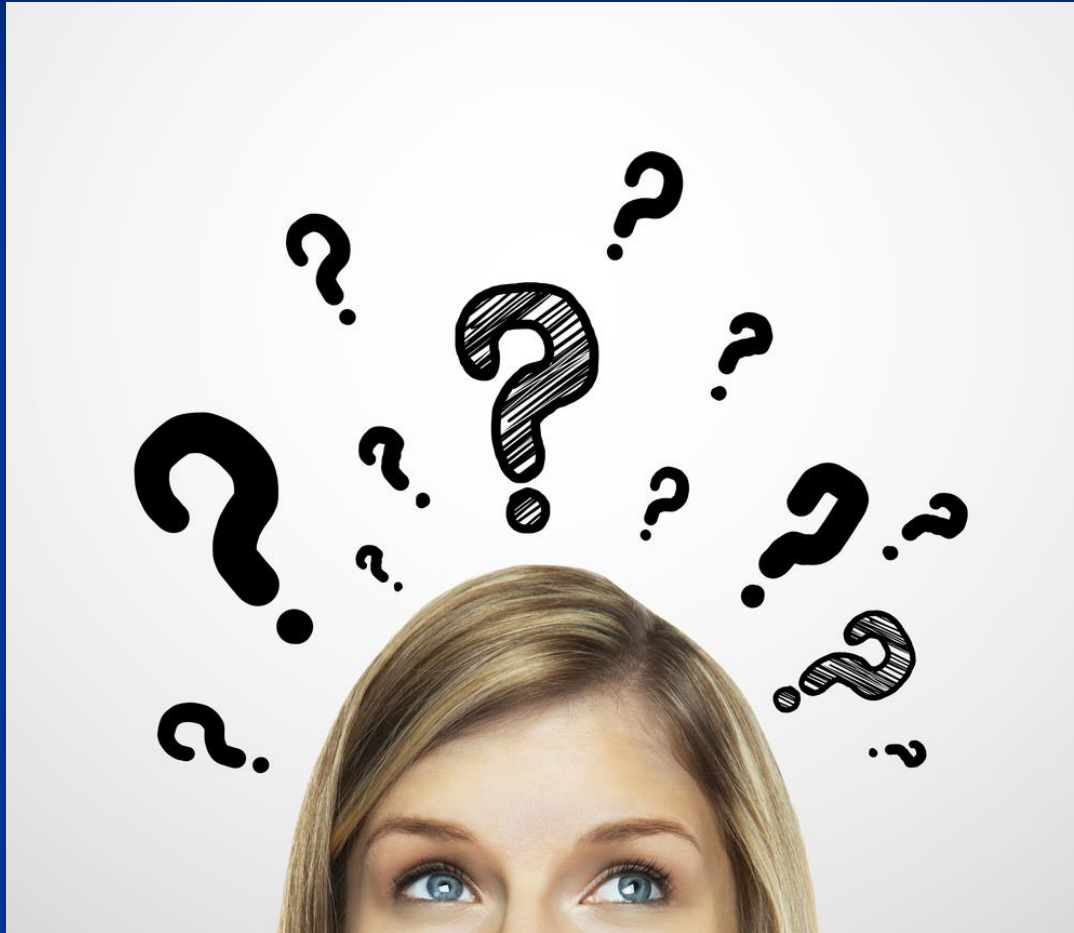
Fun



Success Stories



Questions, Tough Cases



How old am I?



Goal: Pearls!



- This is to be a visual guide to expand your differential diagnosis when encountering patients of color.
- I will review simple, effective treatment pearls for commonly encountered conditions that you can use in clinic every day,

STARTING TOMORROW !

I am sorry...



- Family
- Silly stories

Cuba



Case of the Month

Charles@CrutchfieldDermatology.com




**A CLINICAL
ATLAS OF
101
COMMON SKIN
DISEASES**

*with Histopathologic
Correlation*

A. BERNARD ACKERMAN
HELMUT KERE
JORGE VÁNCHEZ
YING GUO · ANGELIKA HOBER
PAUL KELLY · TETSU KIMURA
GIOVANNI BURBONE · CHERIEA
CRUTCHFIELD · VOLKER STEINKRAUS
WOLFGANG MEYER

Verizon 11:56 AM



DERMATOLOGIST IN YOUR POCKET

Dermatology Diagnostic Algorithm

Begin Diagnosis

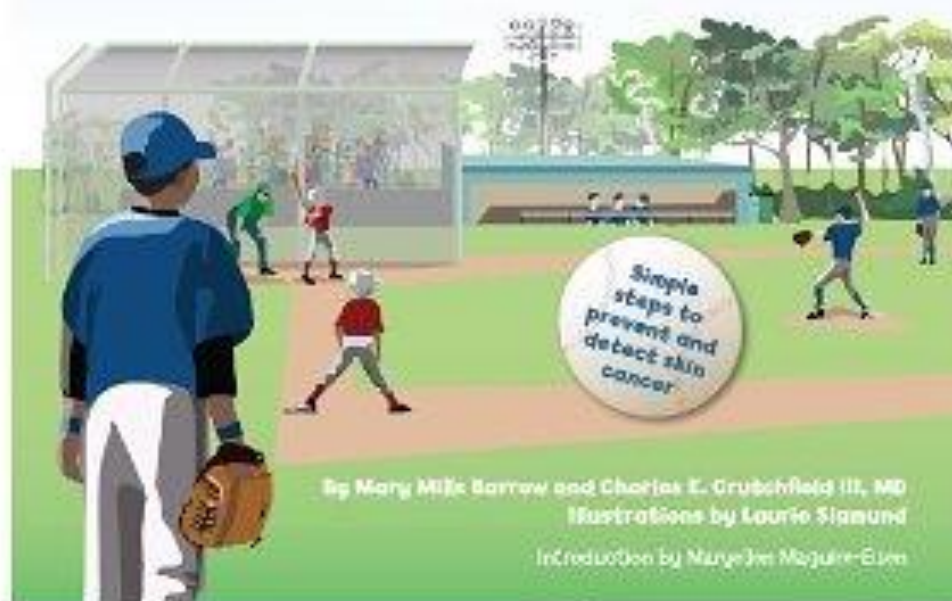
Definitions

List of Diseases

Guidelines for Use

Developed by Peter J. Lynch, MD and Barry Lycka, MD
and Charles E. Crutchfield III, MD

Little Charles Hits a HOME Run!



By Mary Milk Barrow and Charles E. Grubbsfield III, MD

Illustrations by Laurie Stamund

Introduction by Mary-Joe Maguire-Evans

kindle edition

Camp Discovery

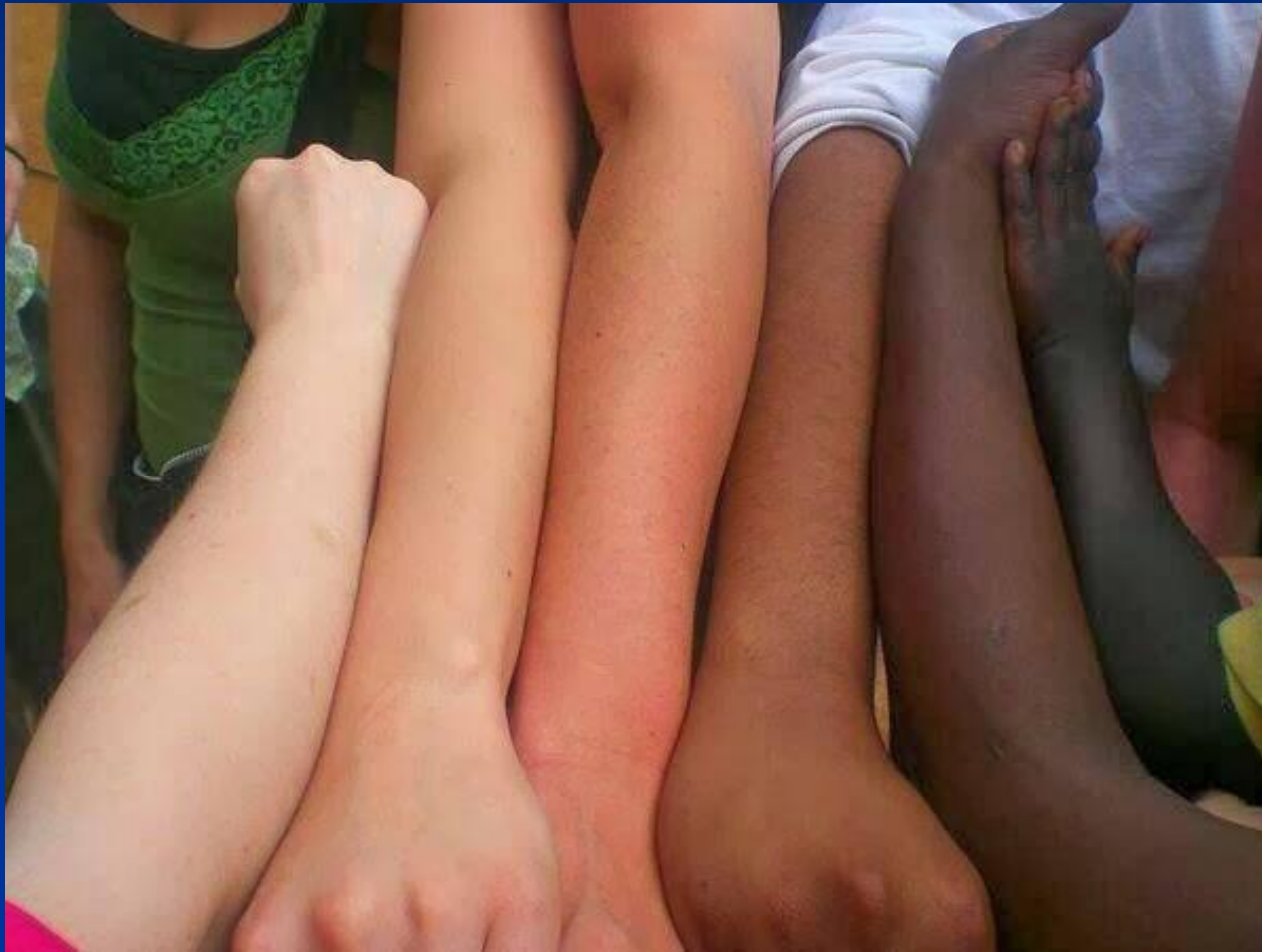






Quick Review

Melanocytes and Skin Anatomy and Color Variation

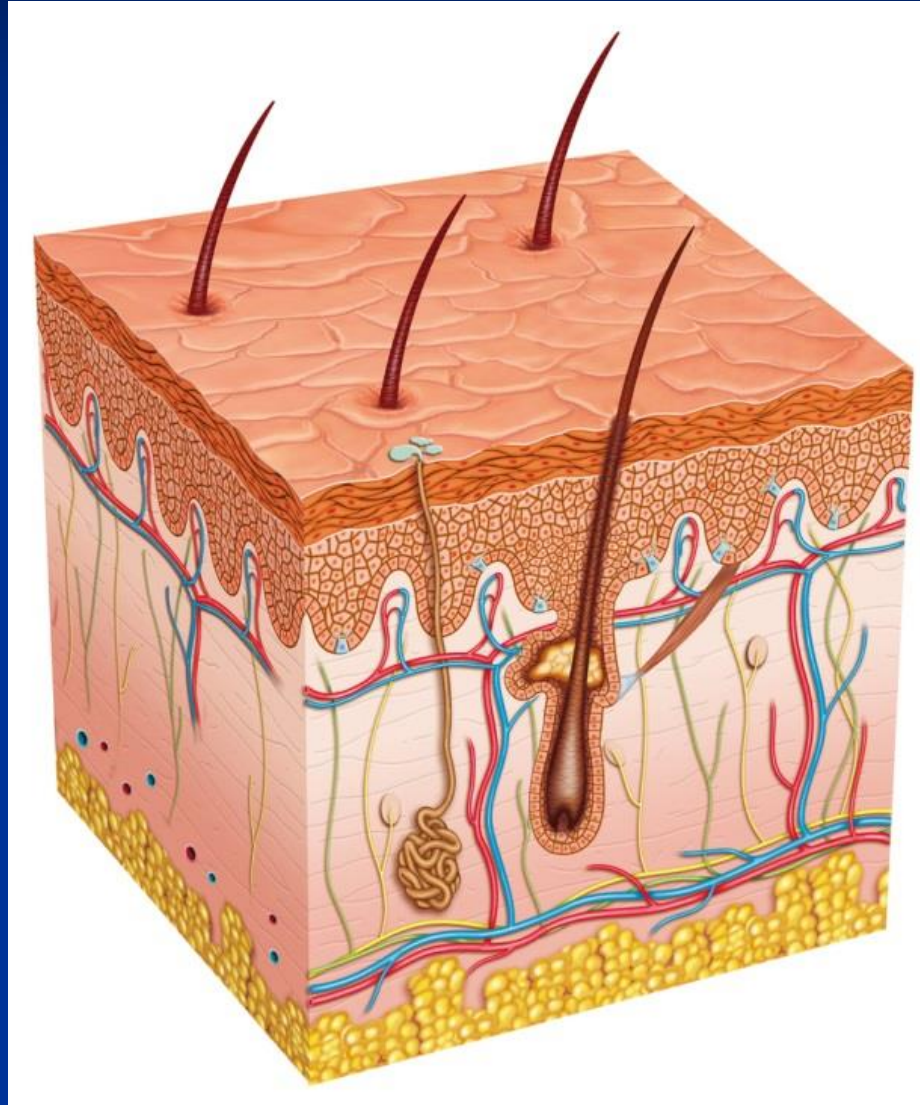


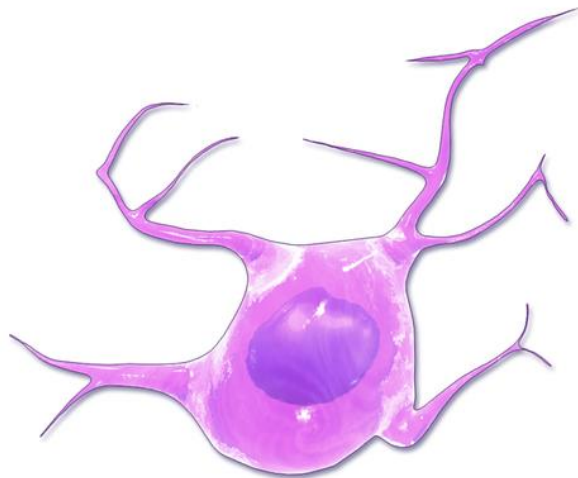
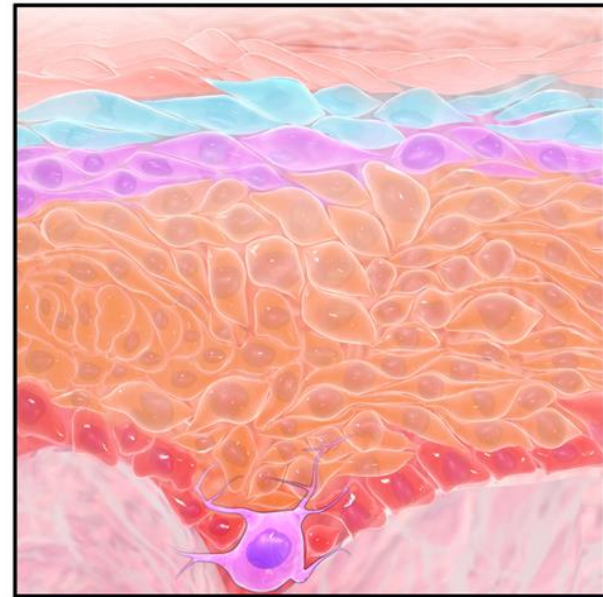
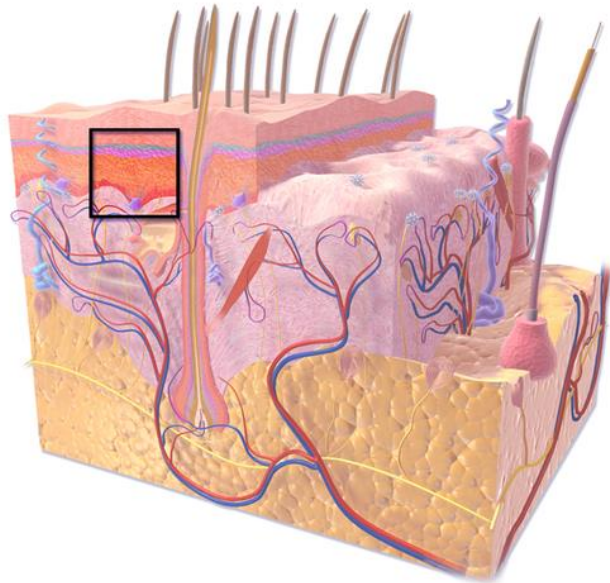
Historical Confusion

- Traditionally, medical textbooks have described skin the color of inflammation to as red, pink, fawn or salmon.
- This is true in lighter skin, but in skin-of-color inflammation appears more often as copper, grey or violaceous in appearance.



Skin Anatomy

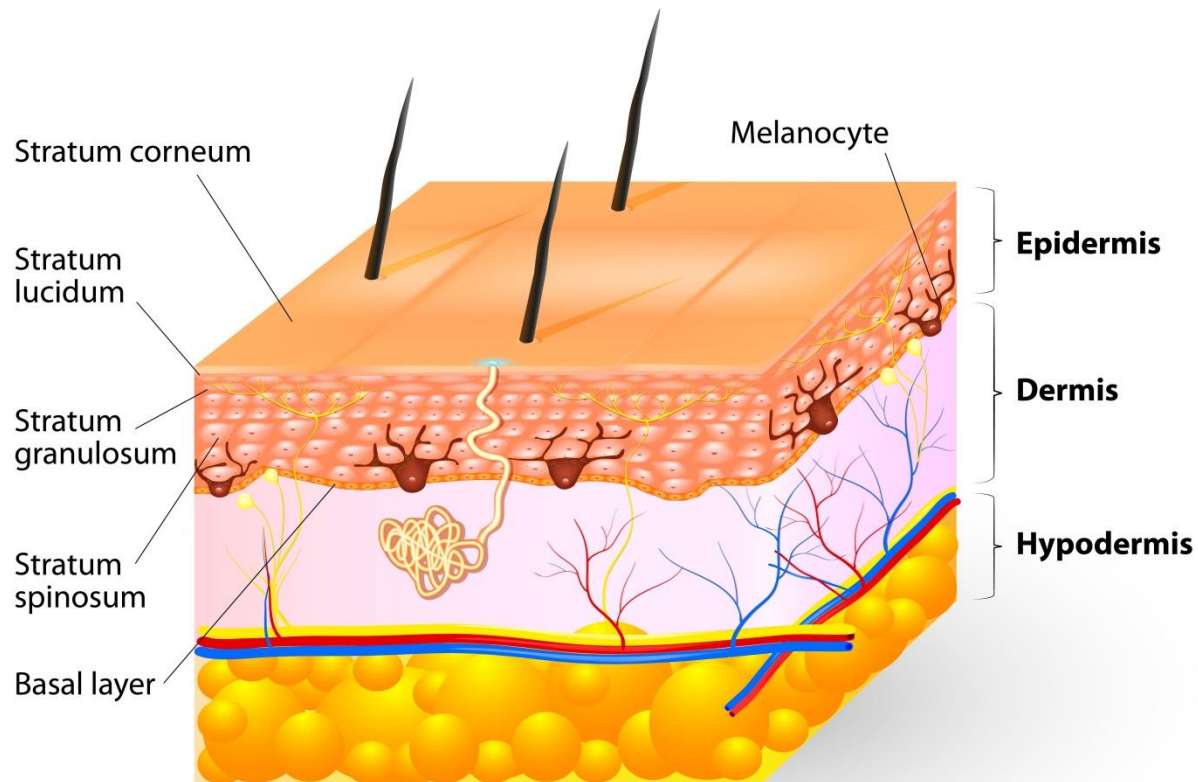




Melanocyte

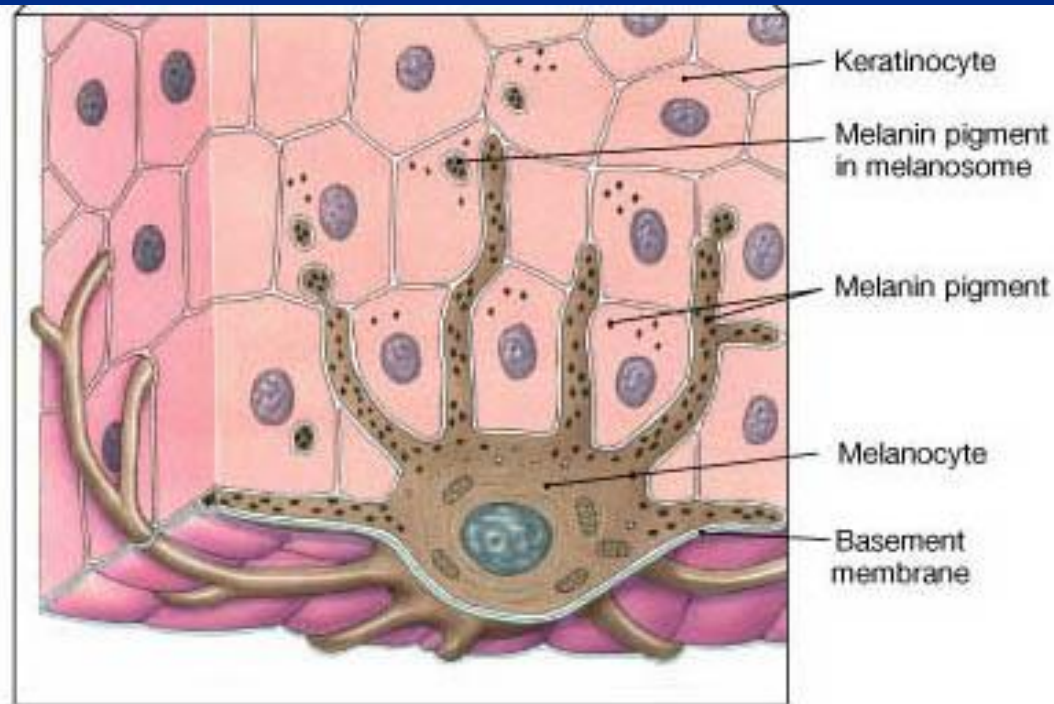
Melanocytes (Dendritic cells)

THE LAYERS OF HUMAN SKIN



Keratinocyte-Melanocyte Unit

36:1



Melanocyte Residence

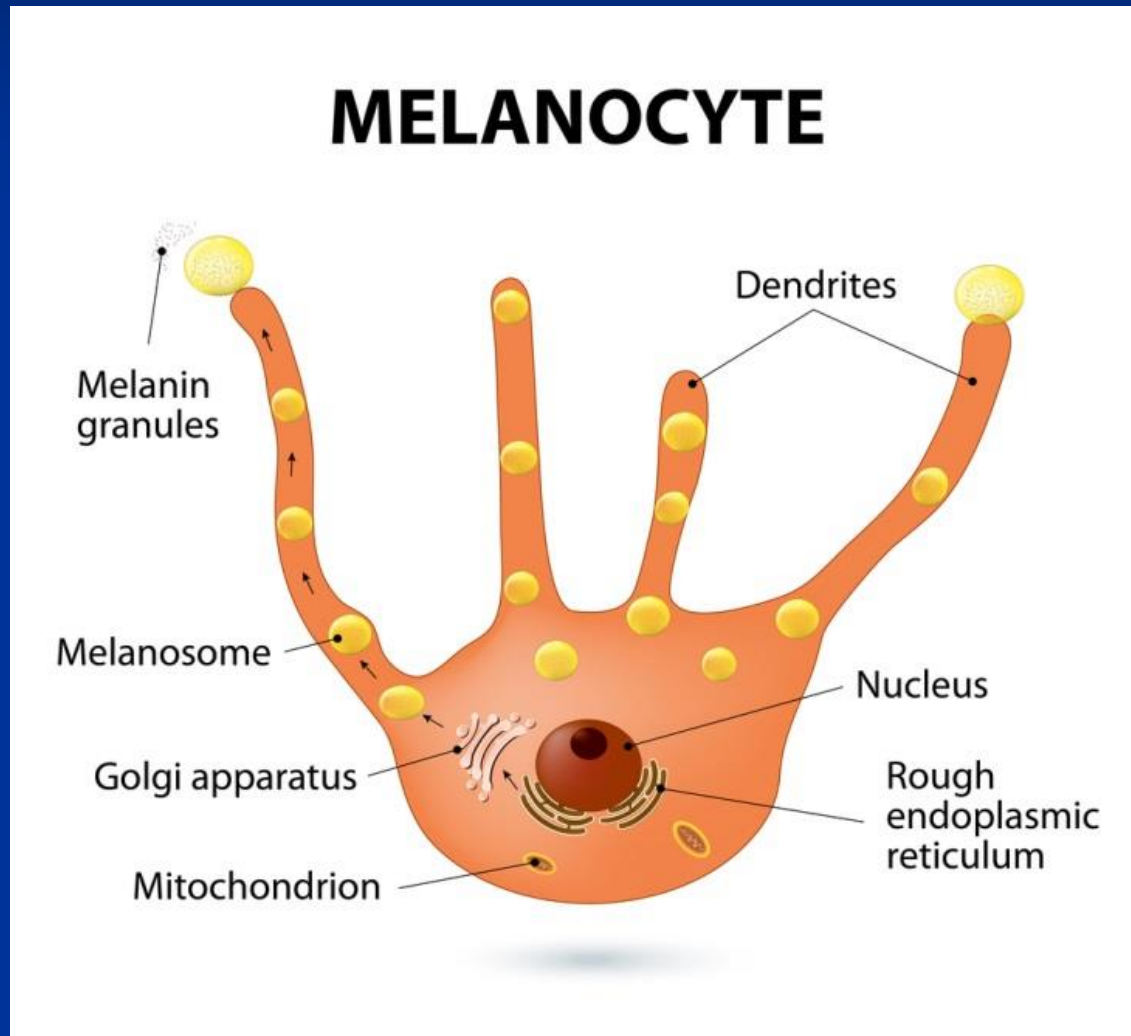
- The epidermis
- The middle layer of the eye (the uvea)
- The inner ear
- The meninges
- Some Bones
- The heart



Melanin

- Melanin is the color pigment produced by melanocytes.
- Melanin is the pigment primarily responsible for skin color, eye and hair color.
- Tyrosinase is the enzyme responsible for melanin production/synthesis. Once synthesized, melanin is contained in a special organelle called a melanosome and moved along arm-like structures called dendrites, so as to reach and become transferred to the keratinocytes.

Melanin Production mediated by Tyrosinase



Melanocyte stained for Tyrosinase



Melanin Types

Eumelanin and Pheomelanin

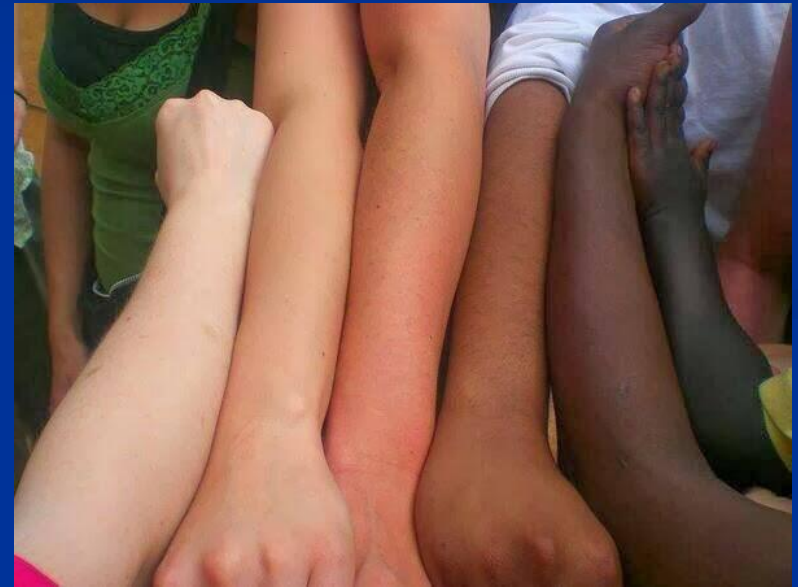




- There are 2 types of melanin.
- Eumelanin is brown/black
- Pheomelanin is golden/orange/red

Fitzpatrick Skin Color Scale

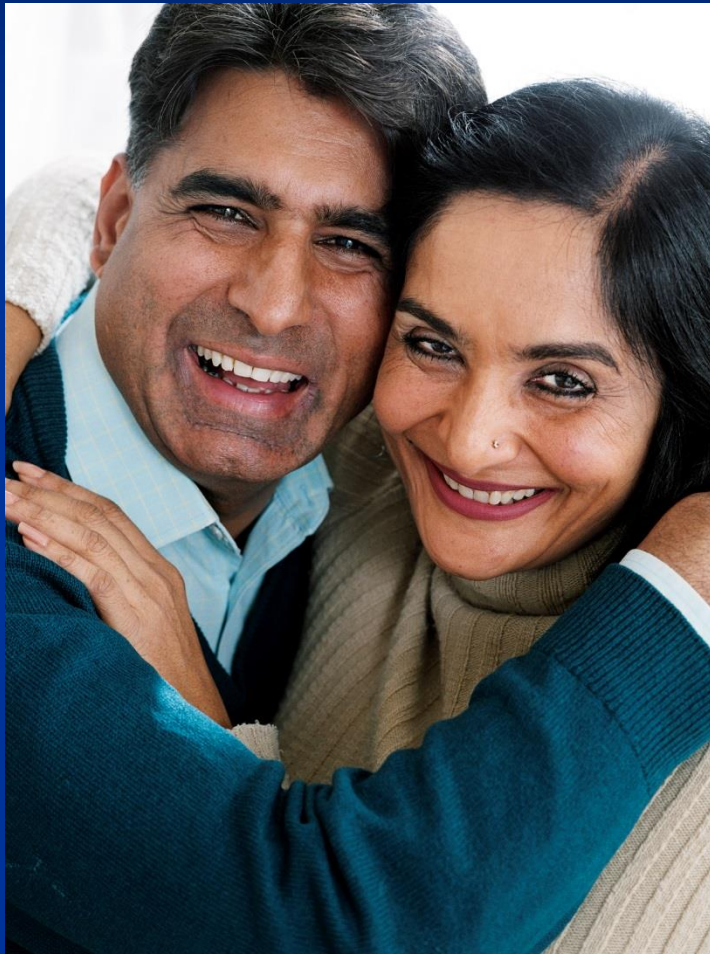
| Fitzpatrick Skin Type | Description |
|-----------------------|---|
| I | Extremely fair skin, always burns, never tans |
| II | Fair skin, always burns, sometimes tans |
| III | Medium skin, sometimes burns, always tans |
| IV | Olive skin, rarely burns, always tans |
| V | Moderately pigmented brown skin, never burns, always tans |
| VI | Markedly pigmented black skin, never burns, always tans |





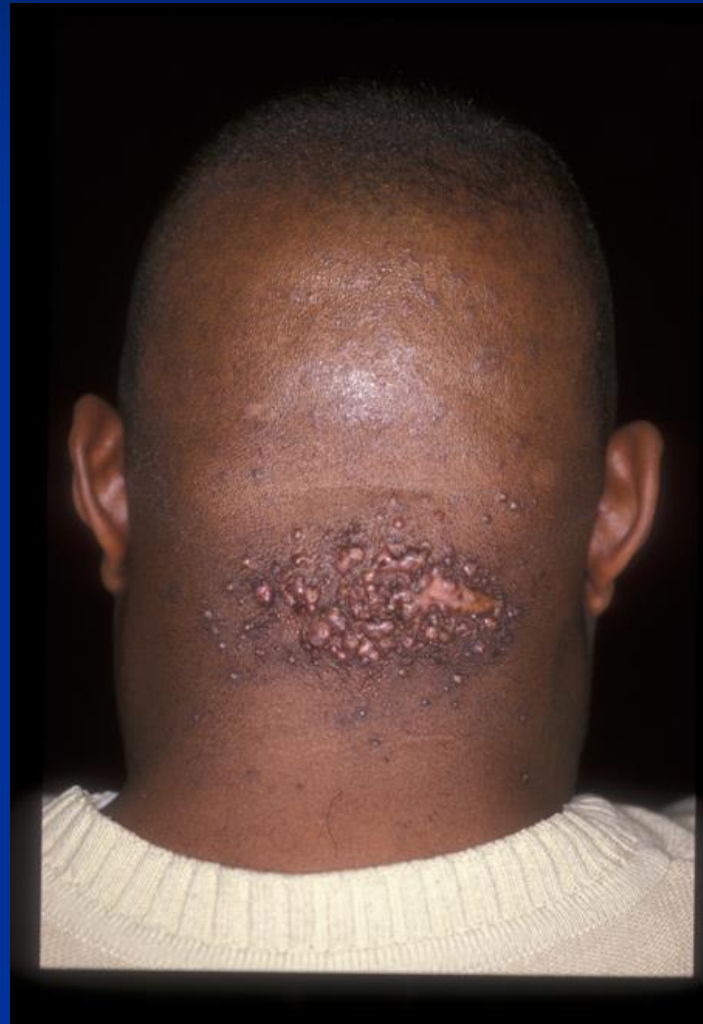


Pigmentation Abnormalities and Cutaneous Disorders in Skin of Color



One of the biggest challenges in treating skin of color has to do with issues of post inflammatory hyperpigmentation and hyopigmentation

Acne Keloidalis Nuchae



Acne Keloidalis Nuchae



Acne Keloidalis Nuchae Treatment Pearls



- No more symptoms, flatten down!
- Decrease inflammation with oral antibiotic
- Use a topical class 1-2 steroid, BID
- Pulse Dye laser
- Injectable Steroids, 10 mg/cc

Dermatosis Papulosa Nigra



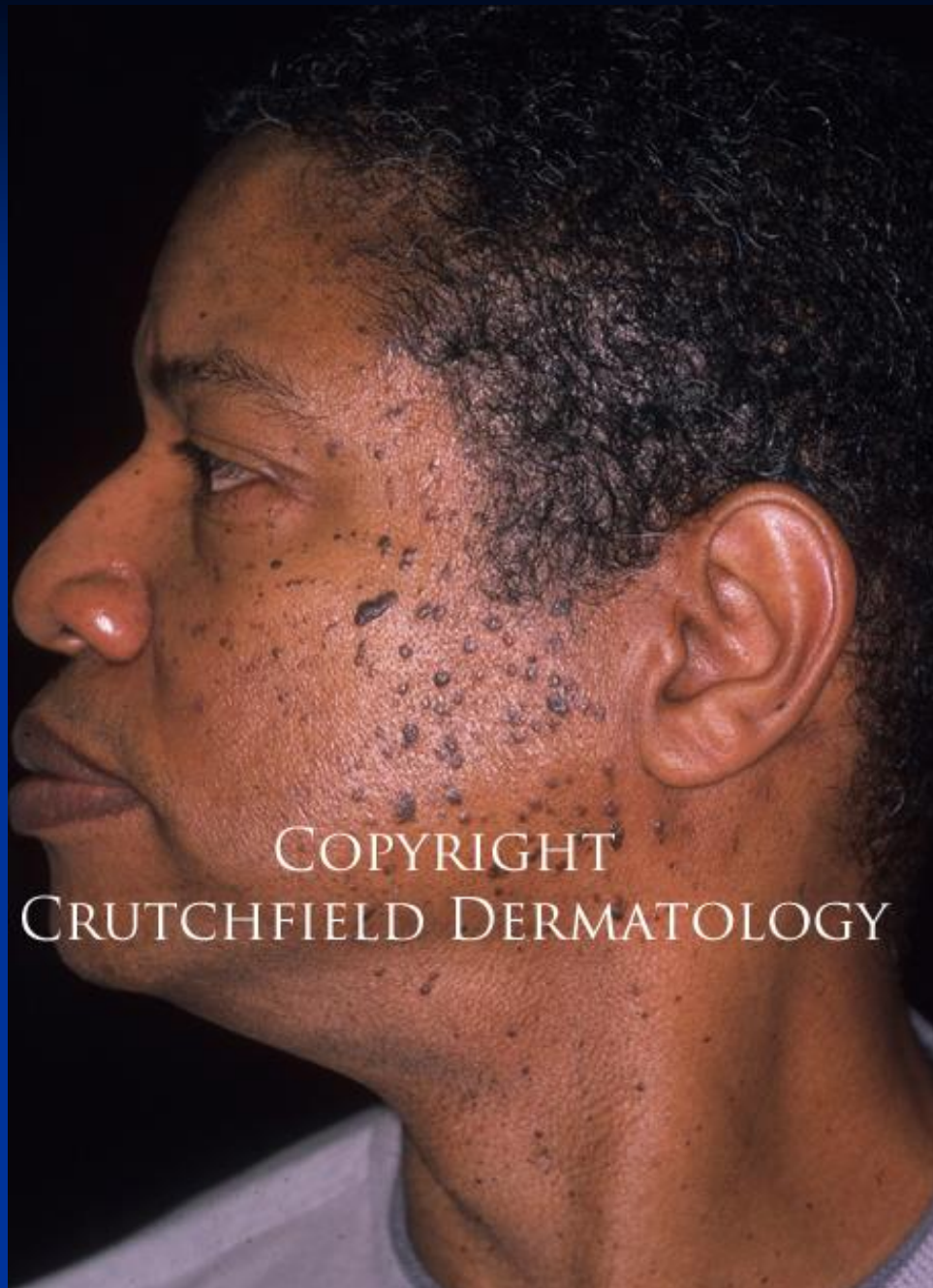


- Dermatosi Papulosa Nigra is a genetically determined condition that is harmless but cosmetically concerning. The pathology is similar to a seborrheic keratosis.



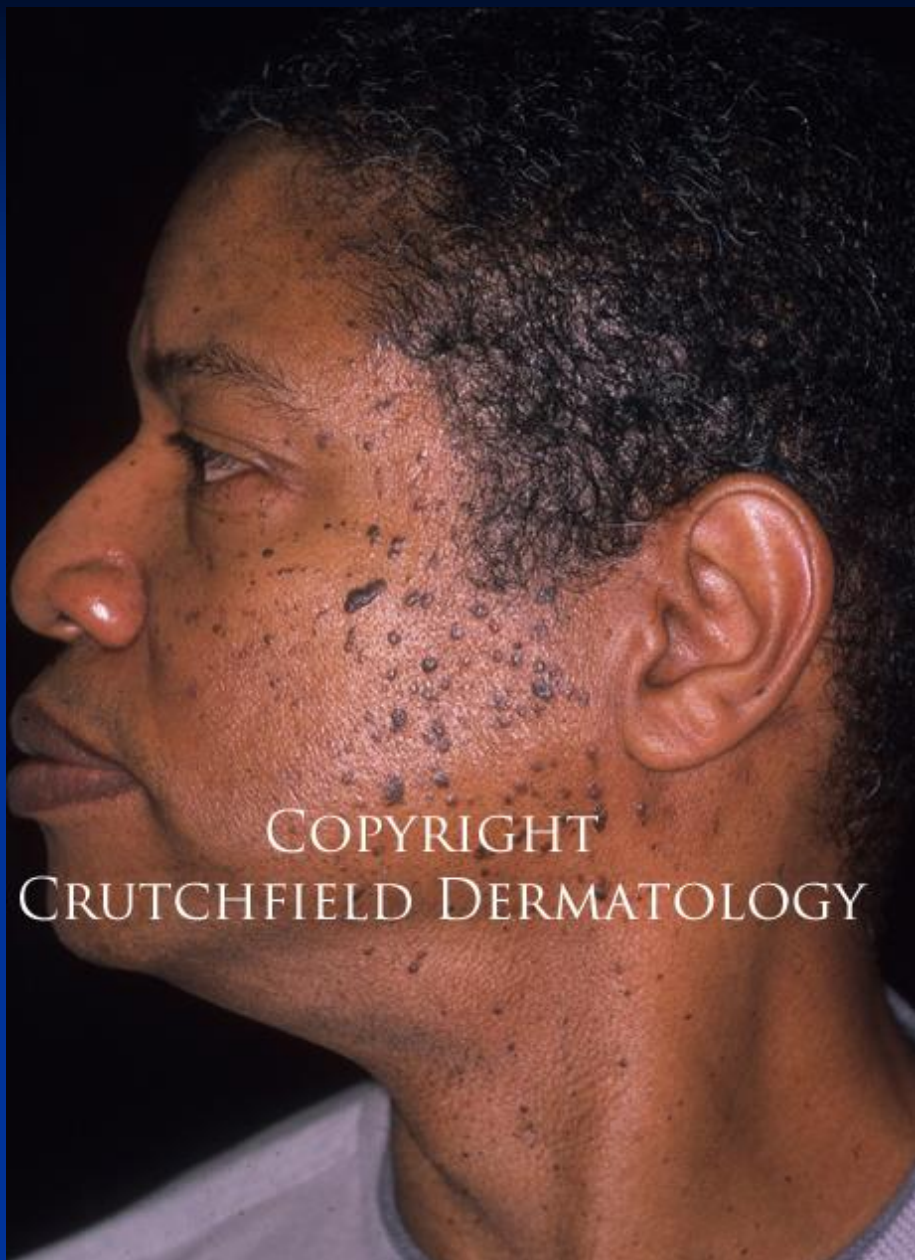






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DPN Treatment Pearls

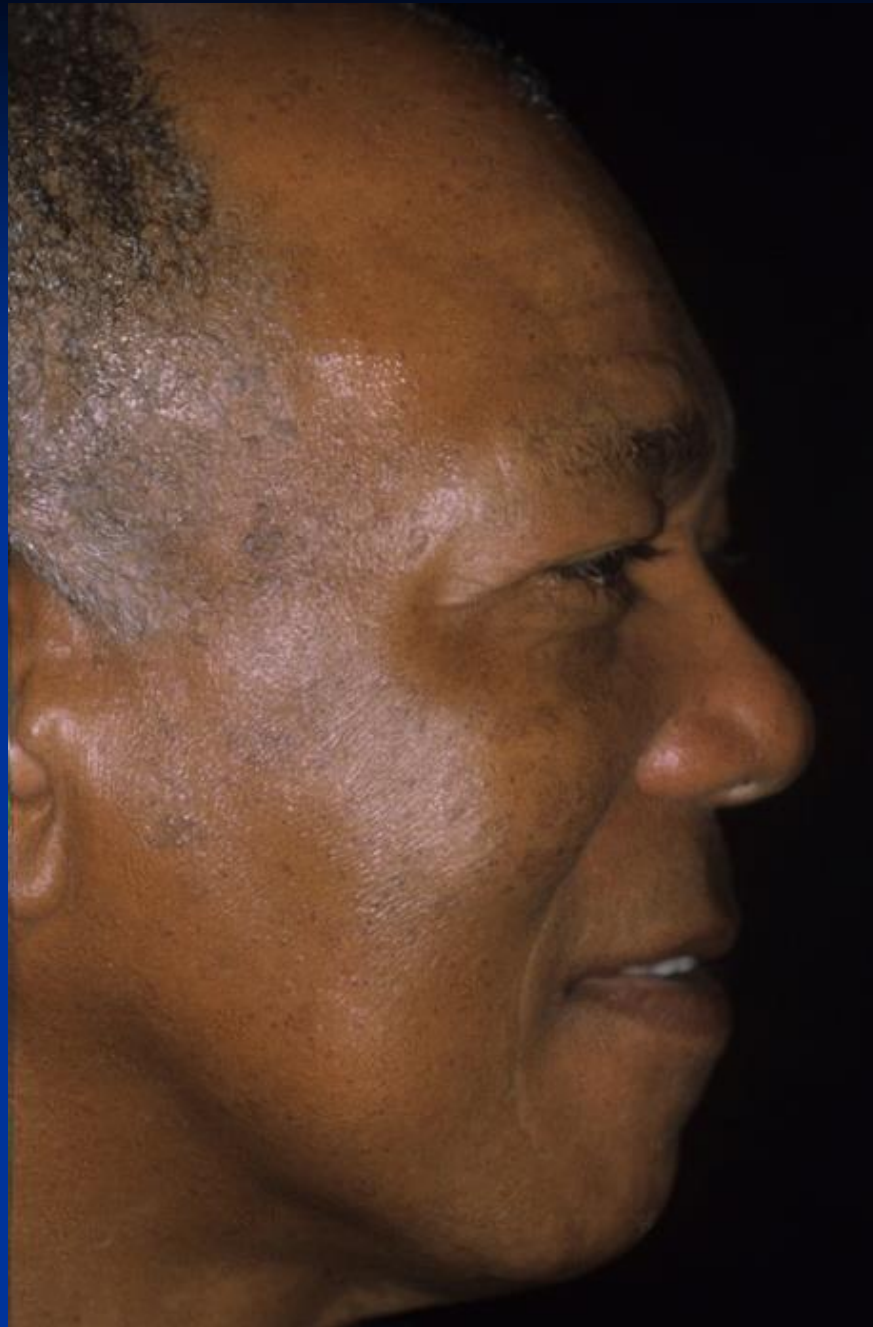


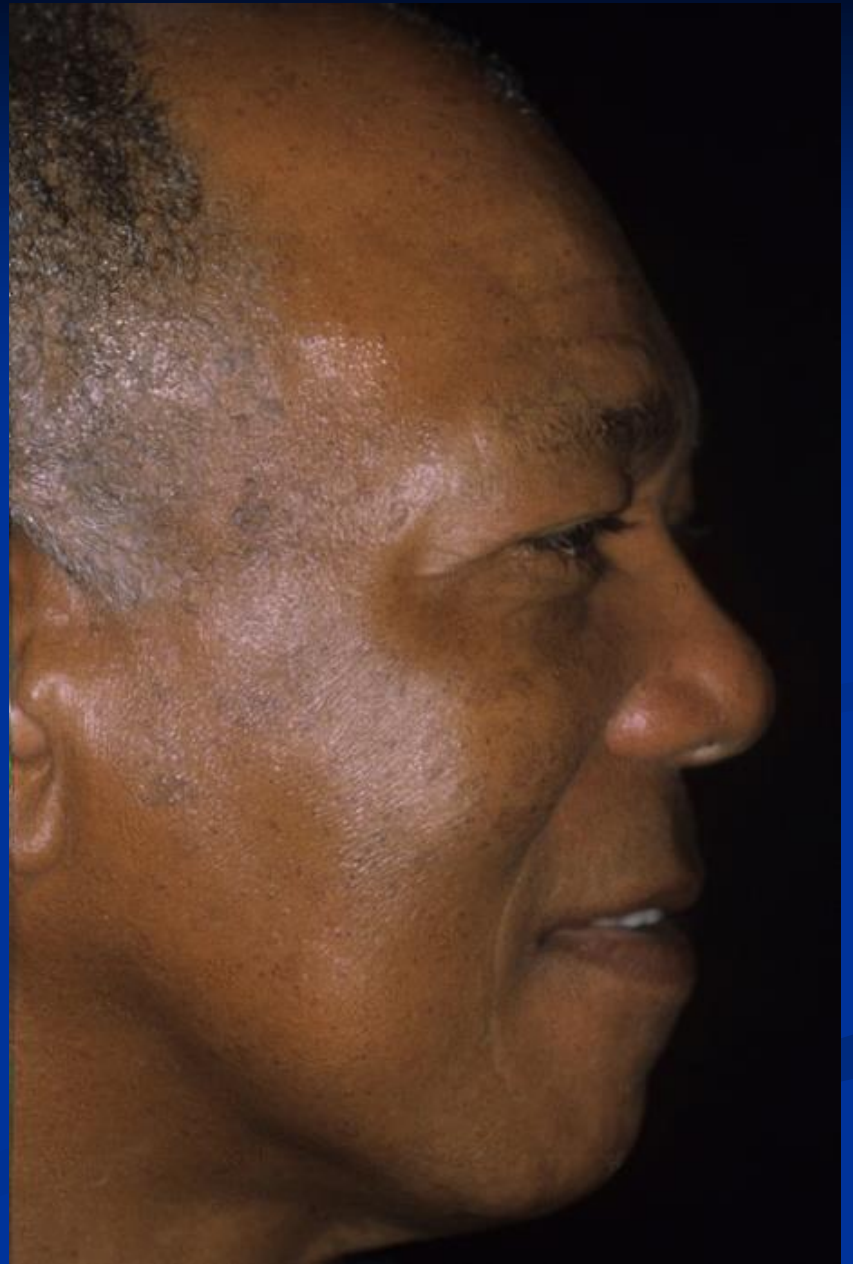
- Double anesthesia
- Hyfercate at low power setting
- Use safety Vacuum
- Do a clean up treatment
- Using topical bleaching agents as needed

Cuba!









Keloids



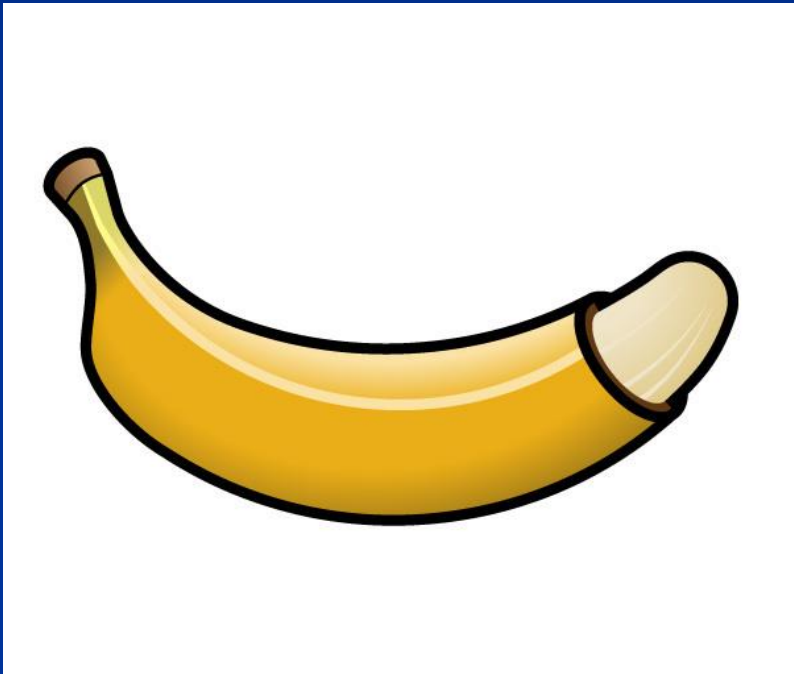


- Keloids are a result of the skin over-repairing itself. The fibroblasts continue to produce collagen even after the defect is filled.

Keloids

- Keloids are tumors that invade neighboring tissue, as opposed to hypertrophic scars
- Earlobe keloids are most common and are not predictors, alone, for the development of keloids elsewhere
- Hormones Age and Time affect the ability to form keloids

Age and Keloids



- 4,000
circumcisions
with
0 keloids

Keloid Treatment Pearls



- Regular kenalog injections x 9
- 10 mg/cc kenalog
- Excision
- Radiation
- Laser treatments





Keloids









Lichen Nitidus



Lichen Nitidus

Treatment Pearls



- Reassure
- Tincture of time
- Class 5 steroid cream, BID x 1 week with symptoms/pruritus
- Phototherapy

Old Walking Woman



Melonychia Striata





- *Melonychia striata* is a harmless condition although careful attention must be paid to the **personal and family history** to determine if a biopsy is indicated. This includes number of nails involved, length of presence, and family presence.

Oral dyschromia and gum hyperpigmentation



Periocular Maturation Hyperpigmentation



Pityriasis Alba









Pityriasis Alba Treatment Pearls



- Topical Class 6 steroid lotion daily x 30 days
- Narrow Band UVB phototherapy 3x/week x 30 days.

Post-inflammatory Dyschromia



Post Inflammatory Hypopigmentation

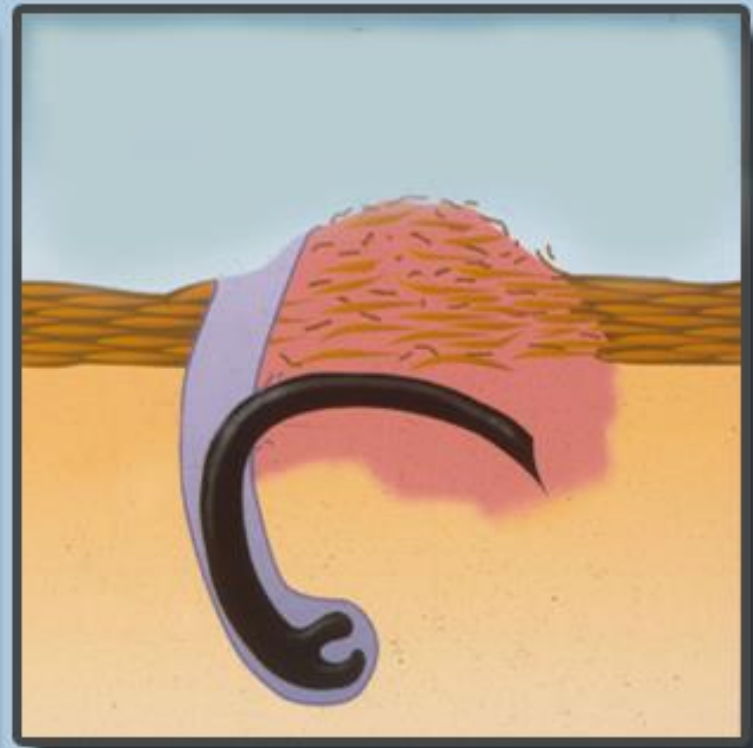
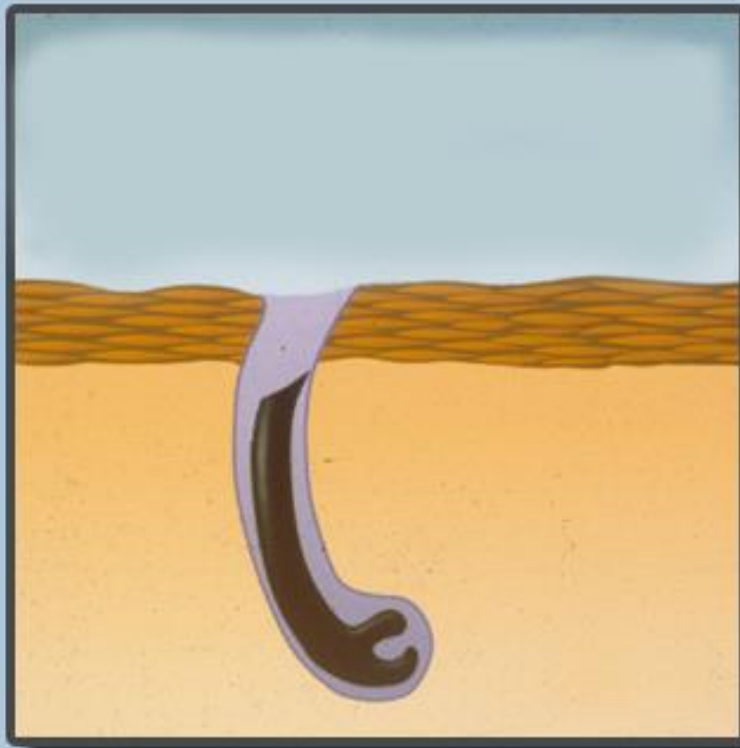




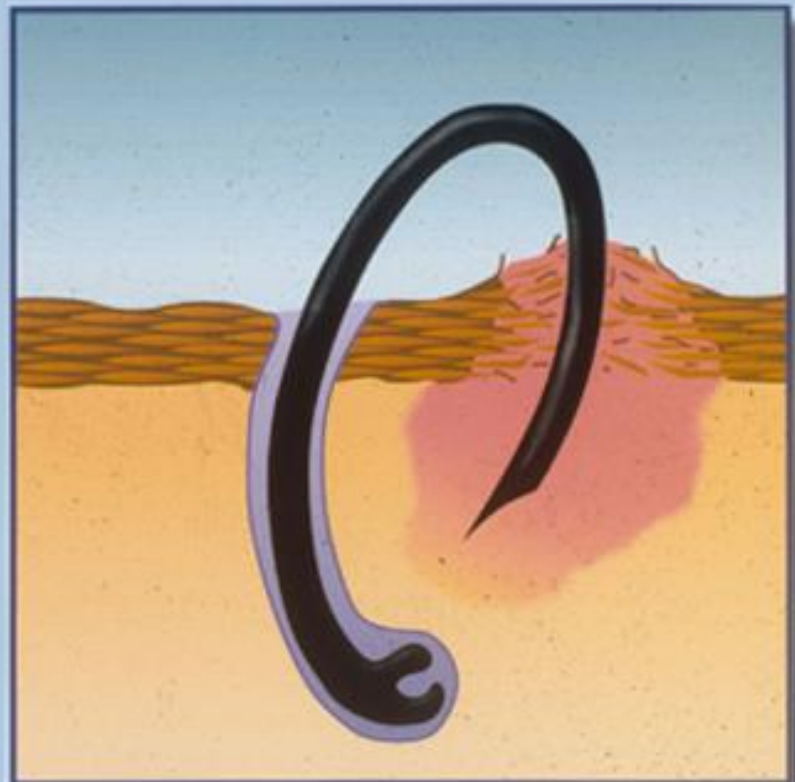
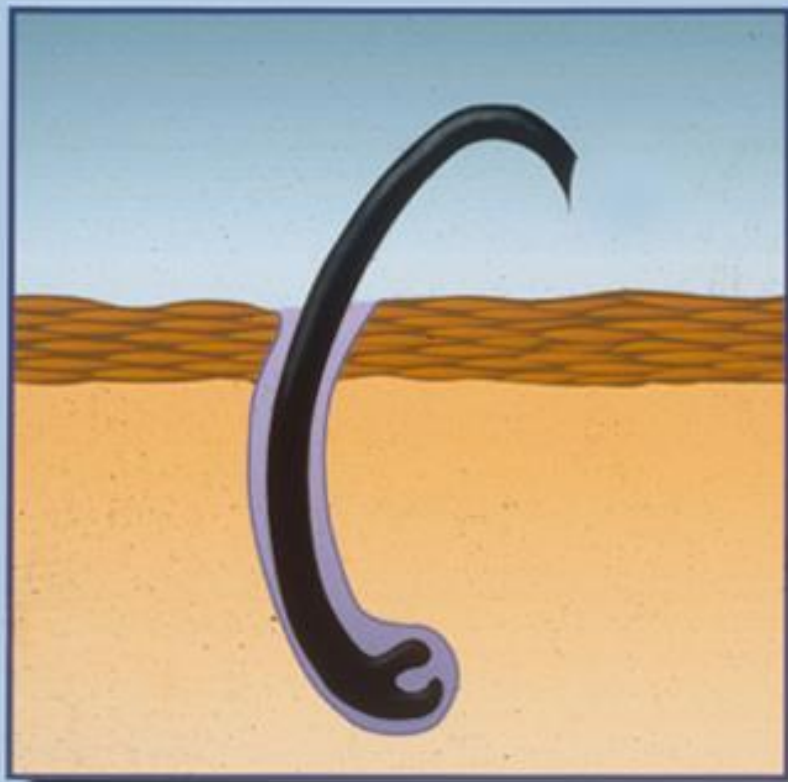
- Hypopigmentation after diaper dermatitis in skin of color is extremely common and will resolve when controlling the dermatitis. It is important to reassure parents of this fact and to remind them it is not a permanent condition

Pseudofolliculitis Barbae

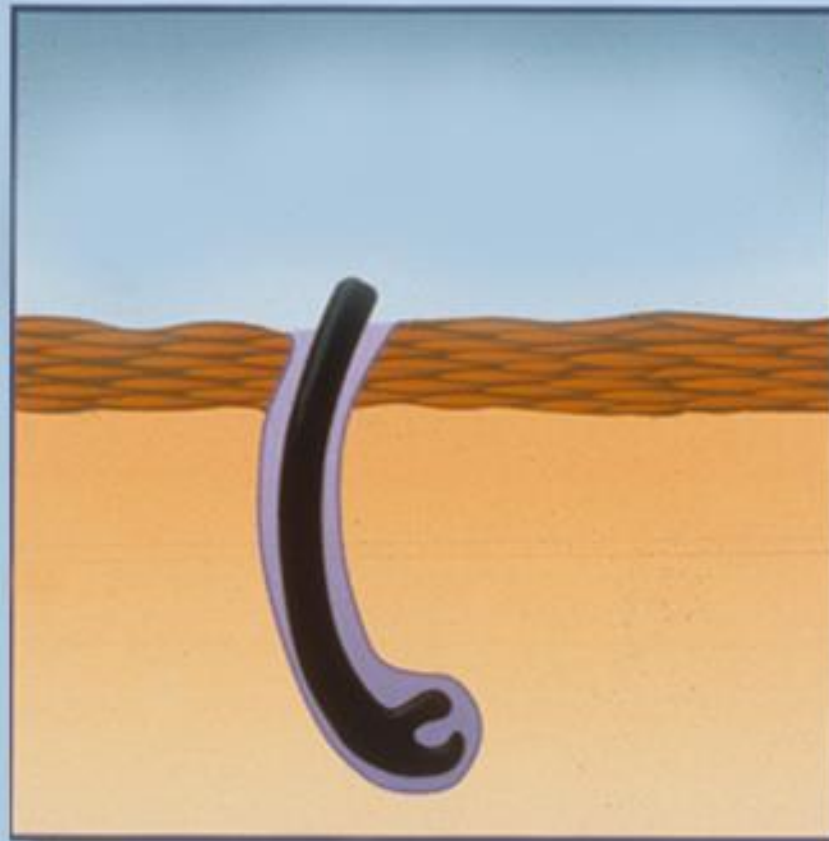




Trans-Follicular Penetration



Extra-Follicular Penetration



Ideal Condition





- The only way to cure pseudofolliculitis barbae is to remove the offending agent, which is the curly hair or hair growing at an oblique angle to the skin surface. Otherwise, improvement from management and control is the objective

Macular hypomelanosis





Macular hypomelanosis

Pearls



- Seen in young women, ages 16-35
- Often diagnosed tinea versicolor
- NO SCALE
- Topical Cleocin lotion and narrow band UVB phototherapy
- Will resolve on own by age 35

Has anyone seen my shoe?



Steroid Hypopigmentation



Tinea Capitis



Tinea Capitis Pearls



- The most effective way to treat tinea capitis is to use medication in the patient for 2 months and to treat everyone in the house with an antifungal shampoo for 2 months.
- Moth balls!

Voight or Futch Lines



Acne



Acne





Acne

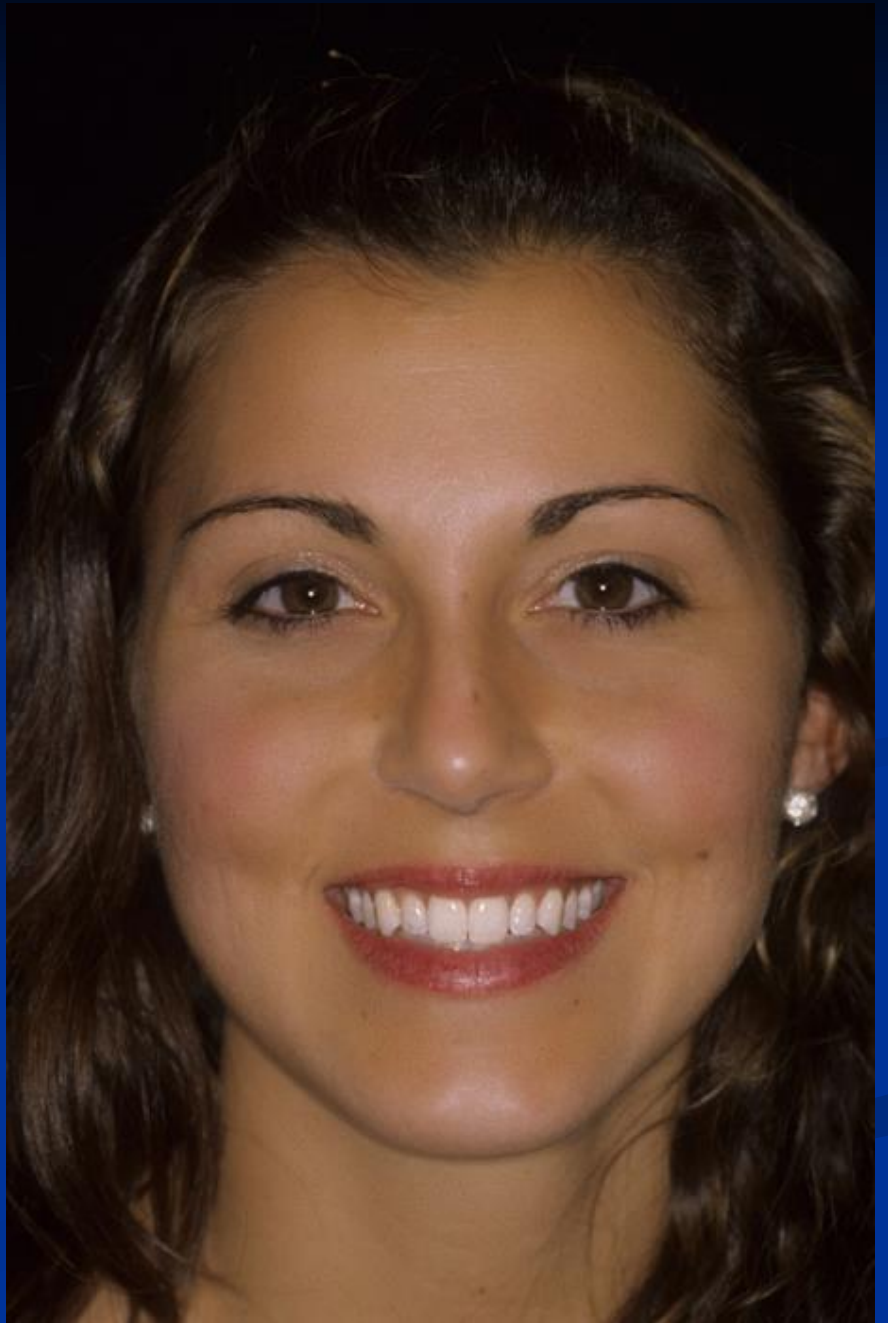


Charles, do you think that is funny?

















- When treating acne in skin of color, hyperpigmentation (post inflammatory hyperpigmented macules) must also be considered and addressed.

Melasma





- When diagnosing melasma, always consider the possibility of a bilateral nevus of Ota (Hori's nevus)

Nevus of Ota (Hori's nevus)



Mongolian Spots/ Patches





- Nevus of Ota and Mongolian patches are the result in the arrest of melanocyte migration during embryologic development. Mongolian spots fade over time and Nevi of Ota get darker over time.









- Melasma is a rapid, uneven, suntan (phototoxic reaction) that is mediated by hormones, genetics and sun exposure. It most commonly becomes a life-long battle.



- Exogenous ochronosis is a condition that results from using hydroquinone products for more than 4 months to lighten the skin.

Exogenous Ochronosis





Hot Tub Joe



Dry (Xerotic) “Ashy” Skin





- The 3 most important steps in having healthy skin are:
- Gently cleanse
- Hydrate
- Protect from Sun and environmental exposures (tobacco)

Pityriasis Rosea







Rosacea





- Contrary to popular belief, Rosacea commonly occurs in persons with skin of color. Rosacea flares has now been associated with an increased activity of serine protease.

Rosacea







Rosacea Treatment Pearls

- Oxymetazoline
- Metronidazole cream
- Klaron lotion
- Cleocin
- Finacea
- Soolantra
- Mirvaso
- V-beam Laser Treatments

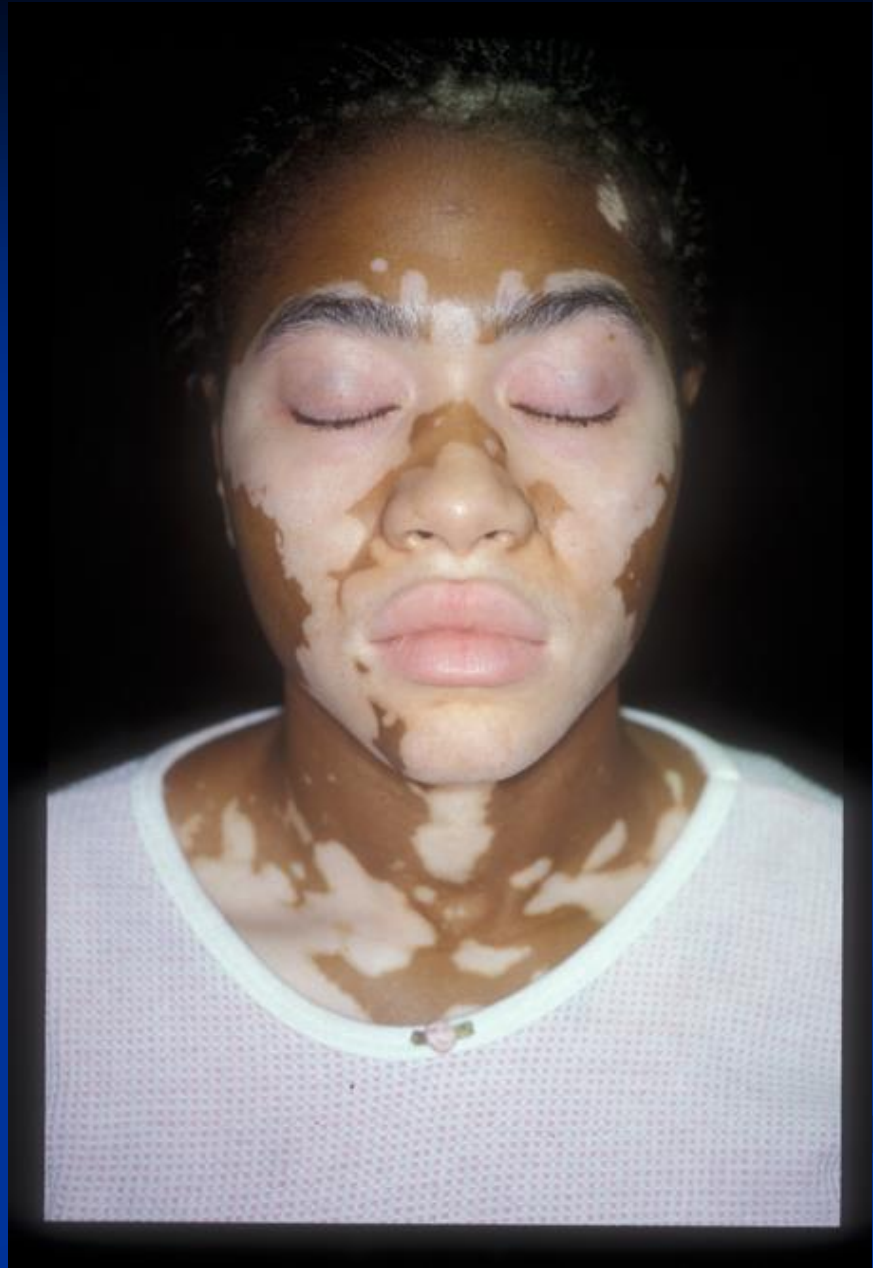


What is Vitiligo?

Vitiligo is a condition where white macules and patches occur on the skin

Vitiligo can be particularly troubling when patients have tan, brown or dark brown skin, as the spots are much more obvious.

Socially and psychologically, vitiligo can be devastating and have profound quality-of-life effects.



What Causes Vitiligo

Vitiligo is a condition where the cells in the skin that produce color (melanocytes) either die early, or are inappropriately destroyed by the patient's immune system.





- Vitiligo is the result of an inflammatory autoimmune attack on melanocytes. New research shows marked improvement of Vitiligo with the treatment of **Janus Kinase Inhibitors** (JAK inhibitors) which seem to block the attack.

1% of people develop vitiligo



5 percent of children of parents
with vitiligo will develop vitiligo

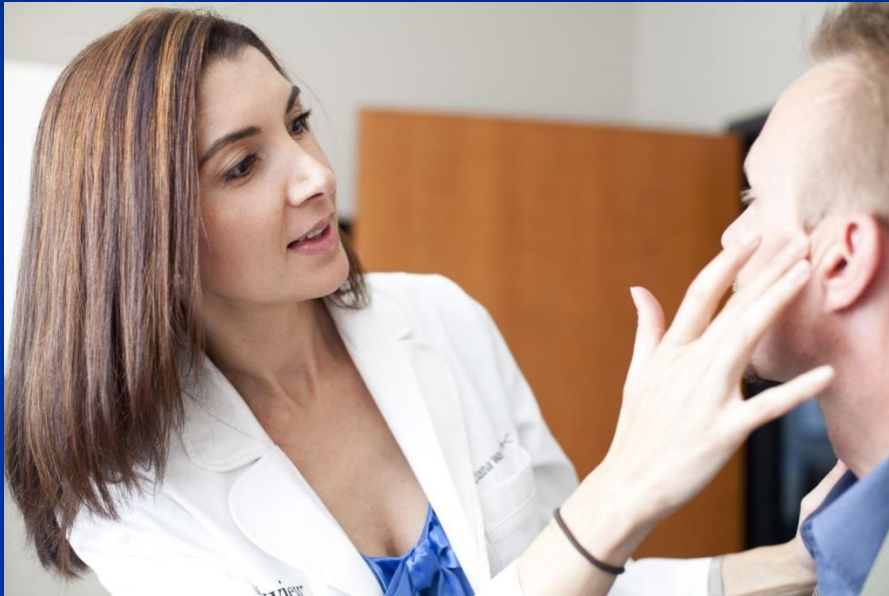
50%



Some insurance companies consider vitiligo to be only a cosmetic concern



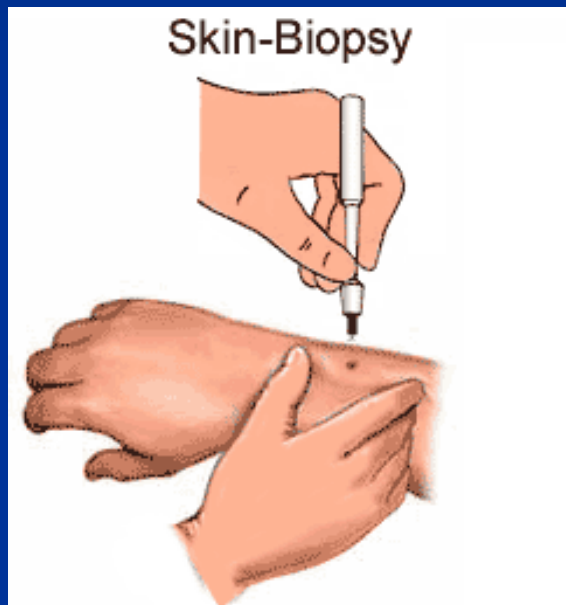
Diagnosis: Clinical Presentation



Diagnosis: Woods Lamp



Diagnosis: Biopsy with Special Stains

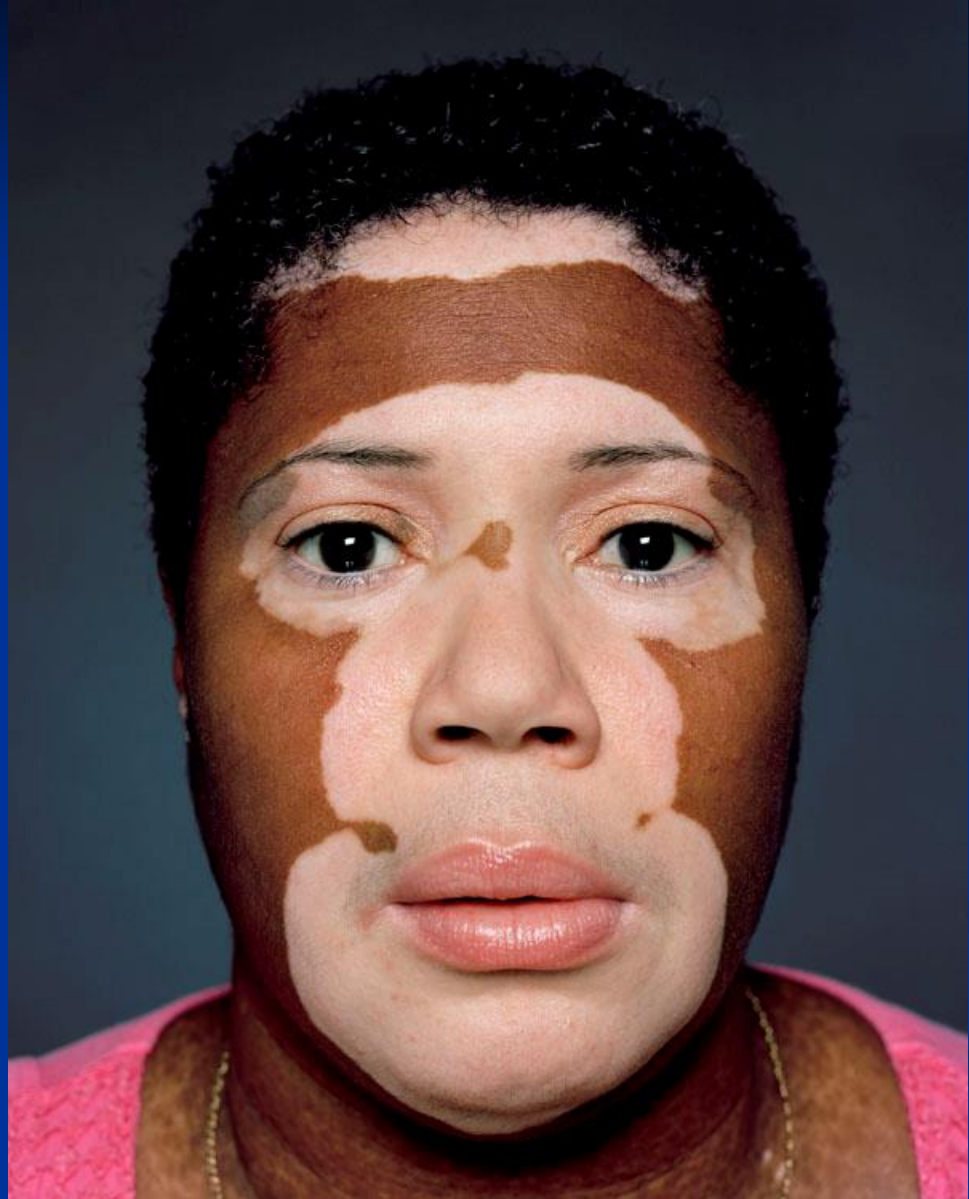


Superbowl!

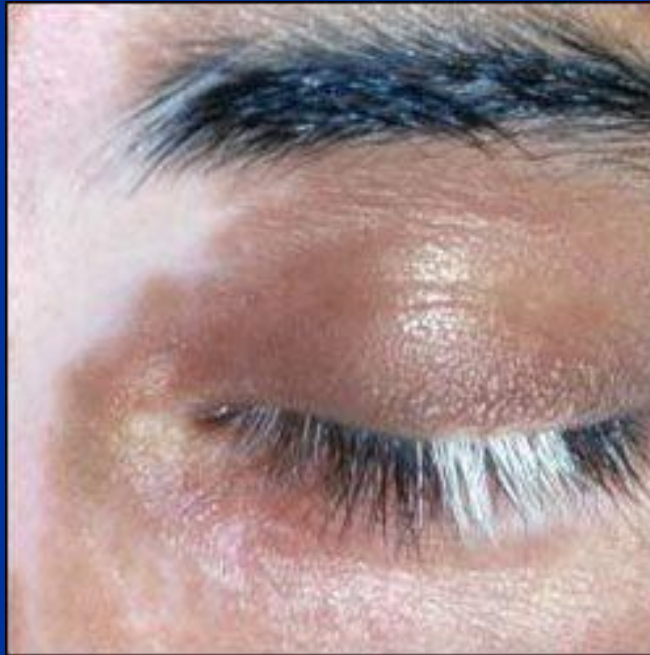


Common Clinical Presentation

Very
Symmetric
Perioral
Periocular
Elbows
Knees
Hands



Vitiligo can also affect the hair



Prevention



Check for Anemia



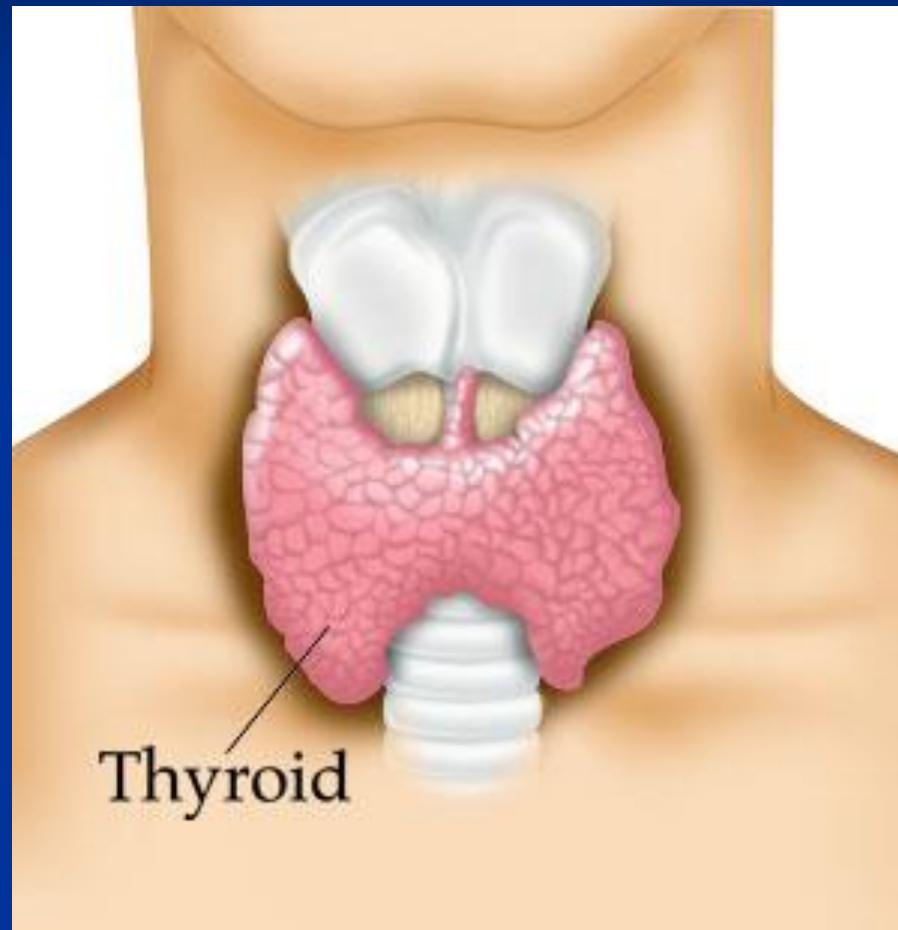
Check for Alopecia Areata



Check for Halo Nevi



Check for Thyroid abnormalities

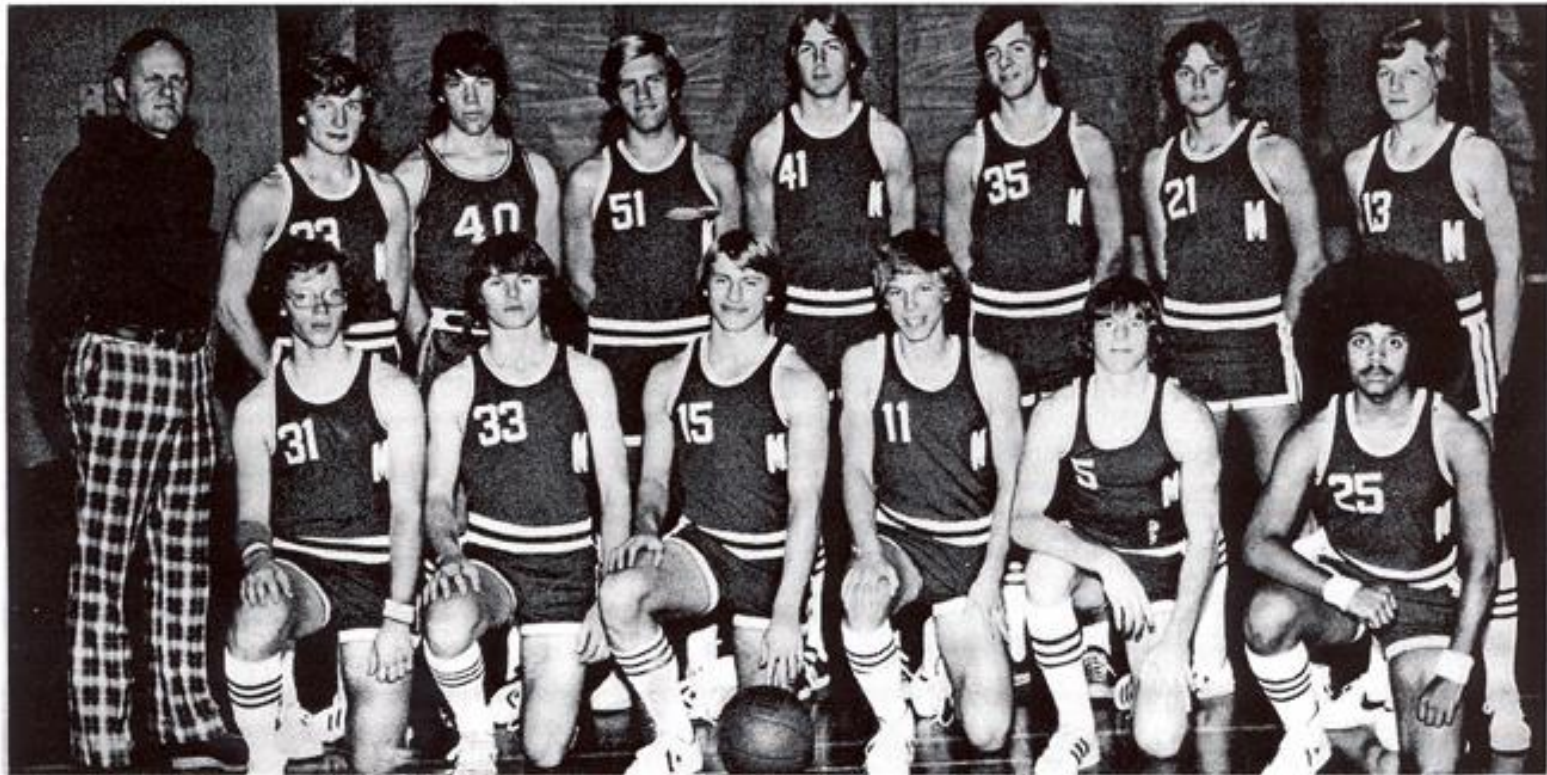


Olivia, do these guys look old?



Olivia, Are these guys old?

MINNEHAHA ACADEMY ALUMNI BASKETBALL TOURNAMENT



Saturday, April 5th

Short shorts not required

Vitiligo Treatment Success Stories



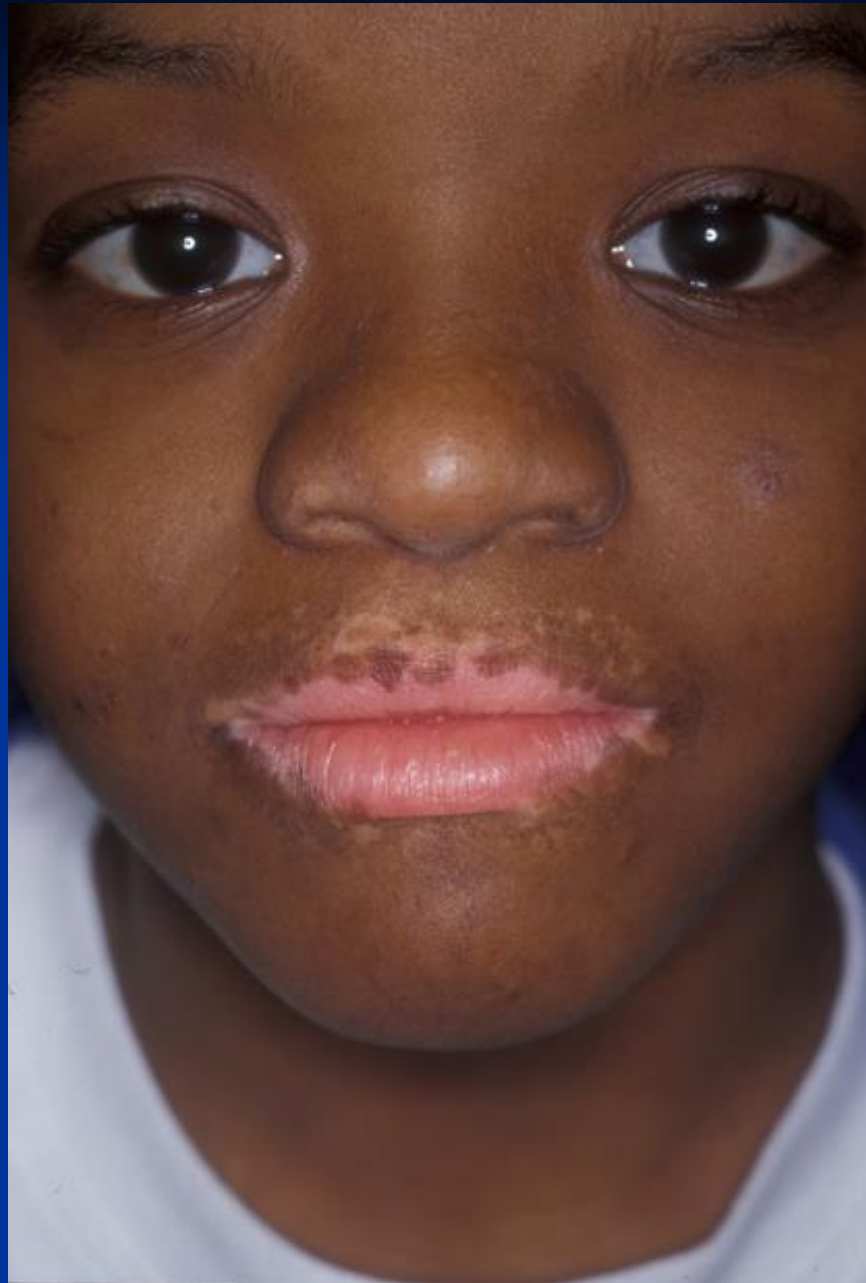


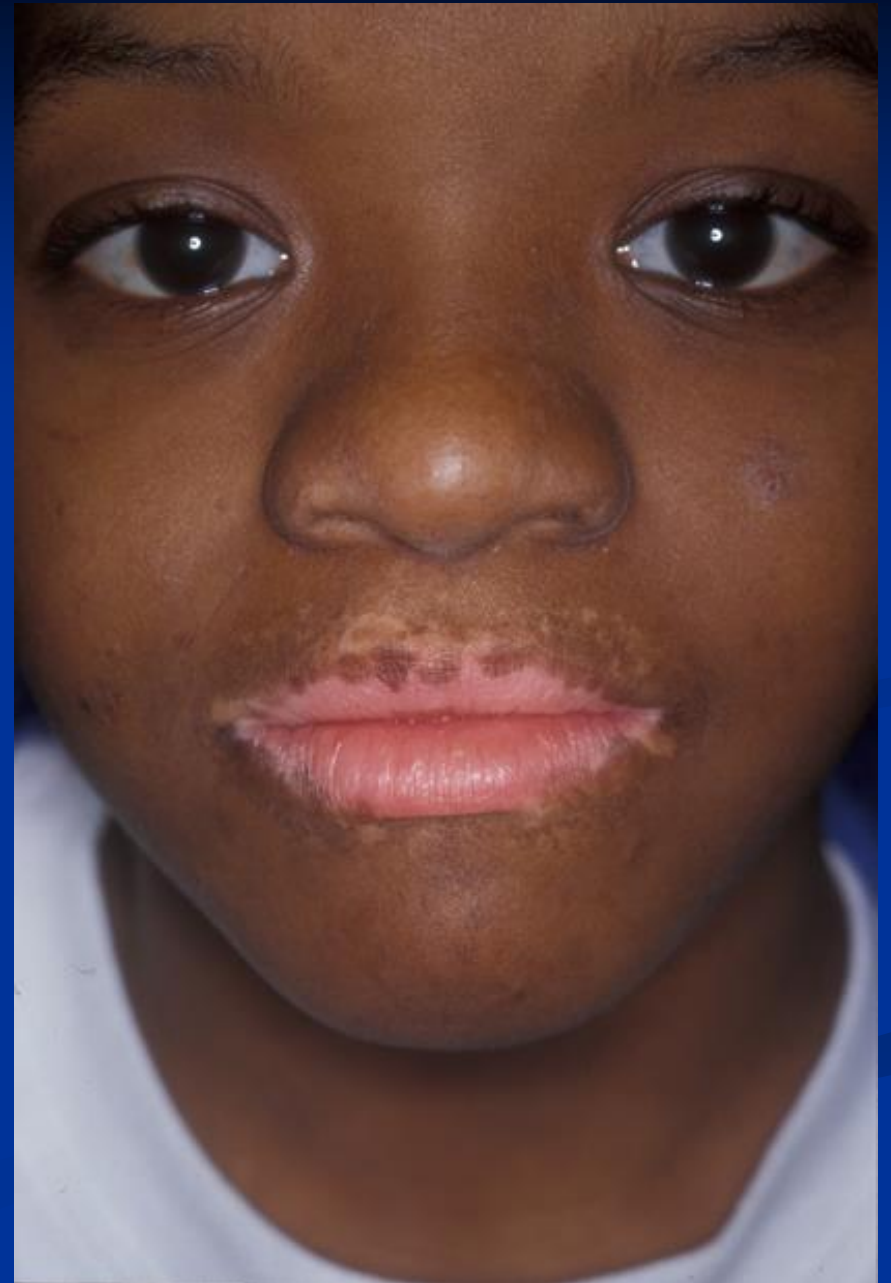


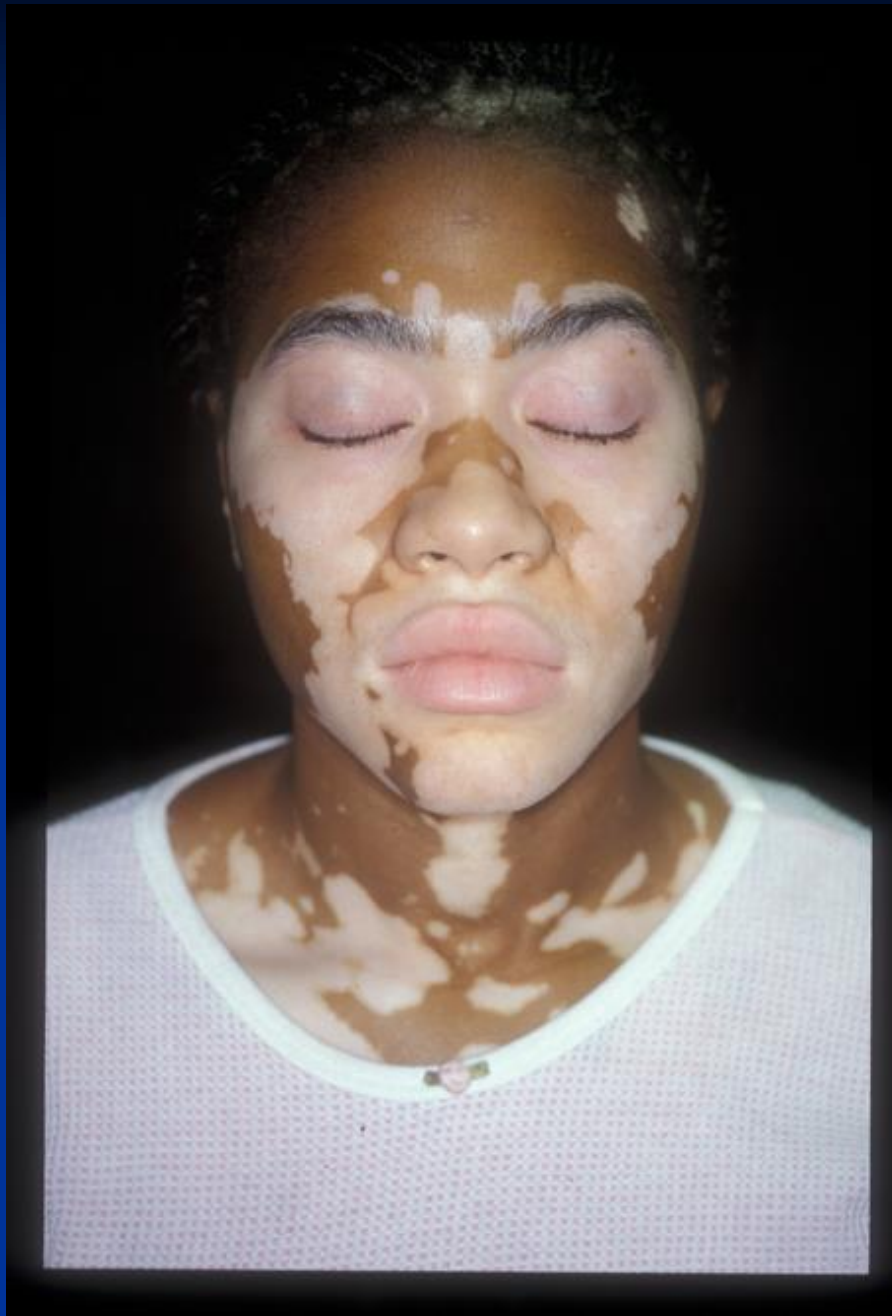






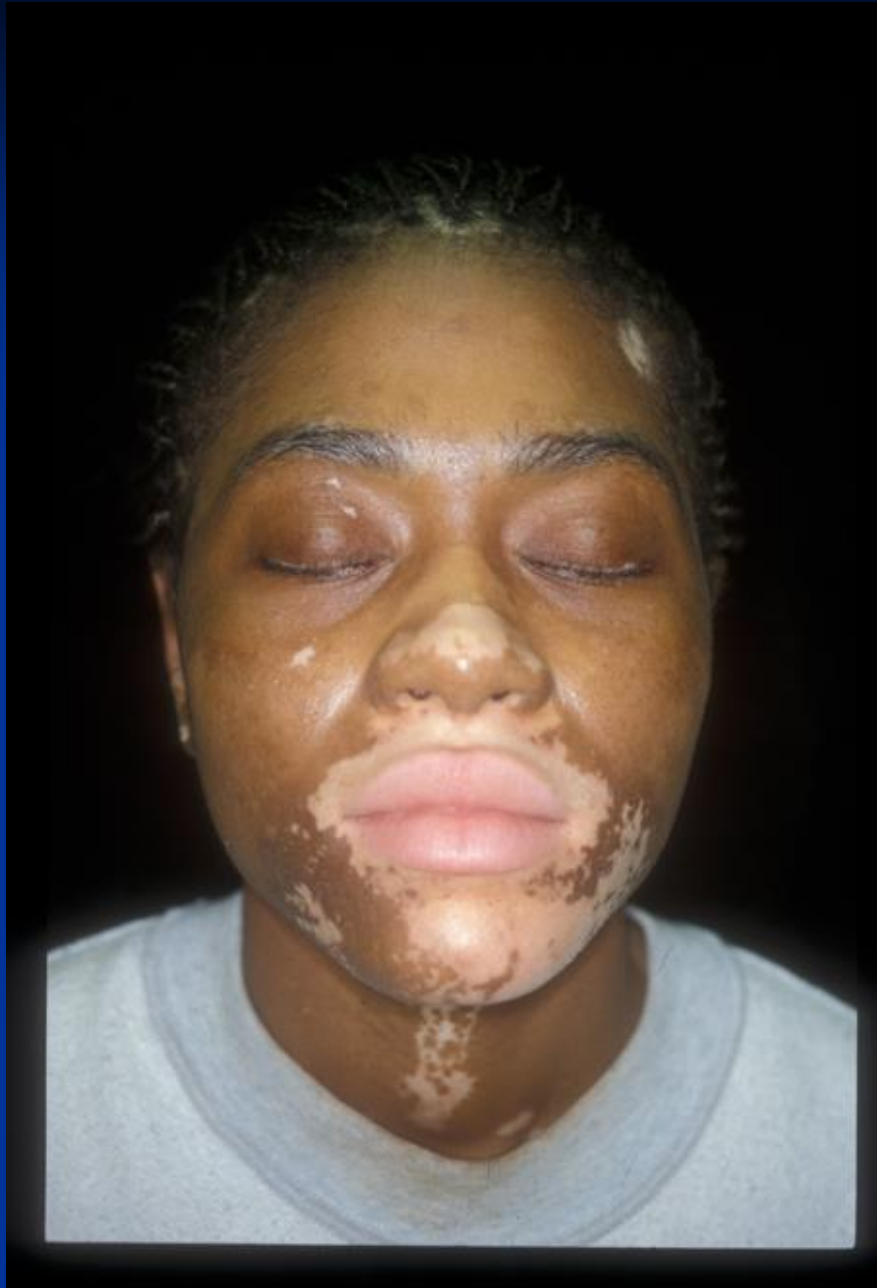


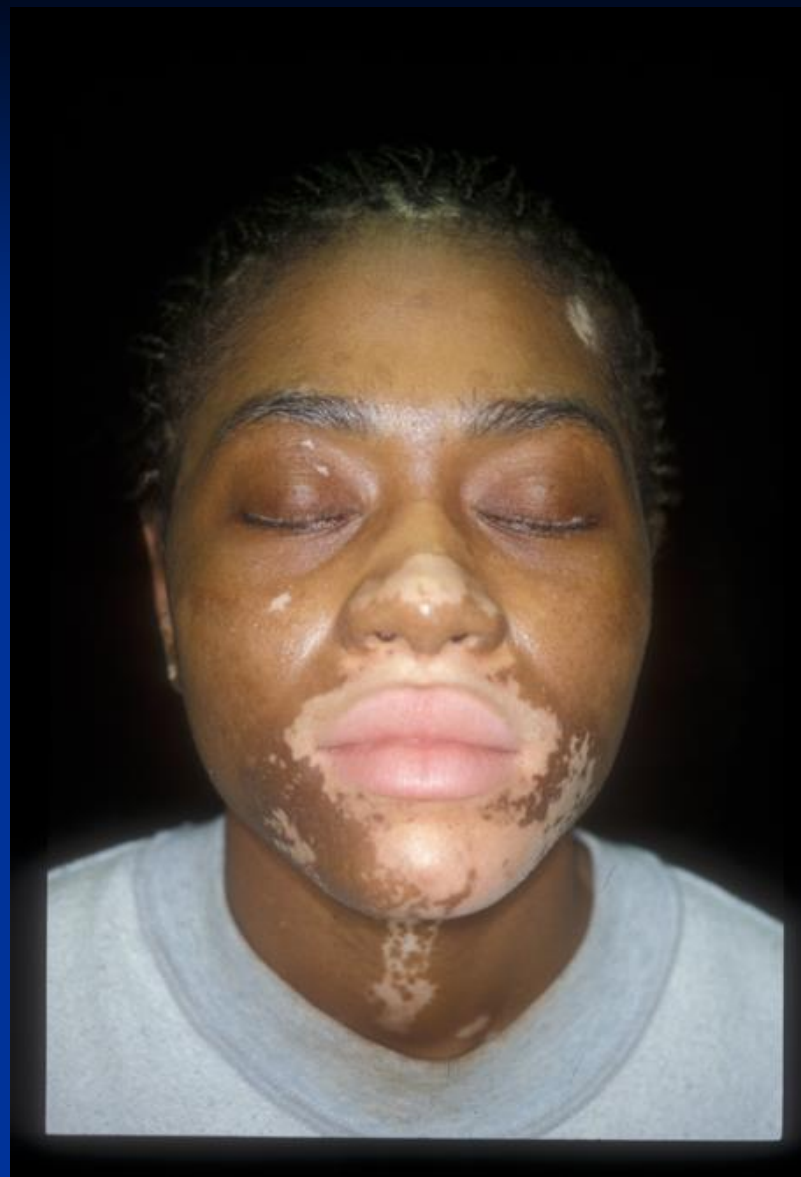


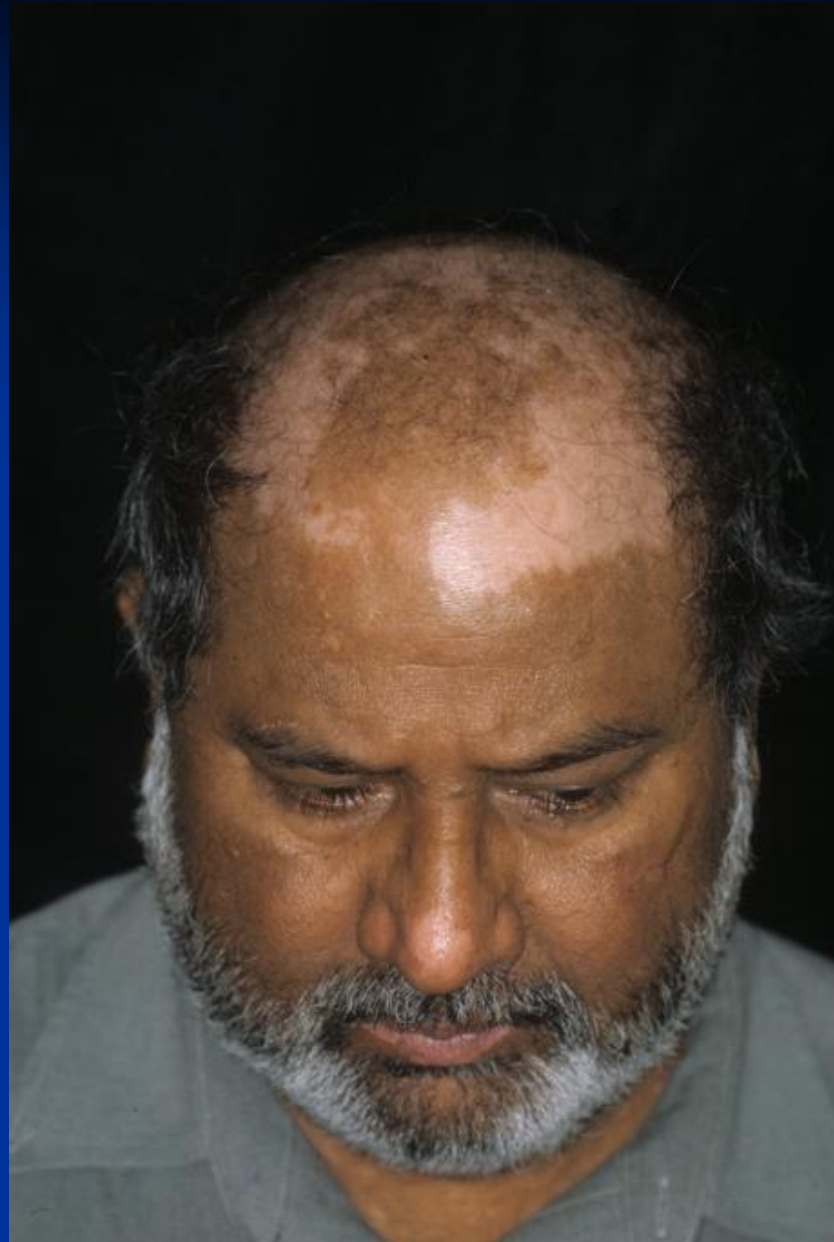




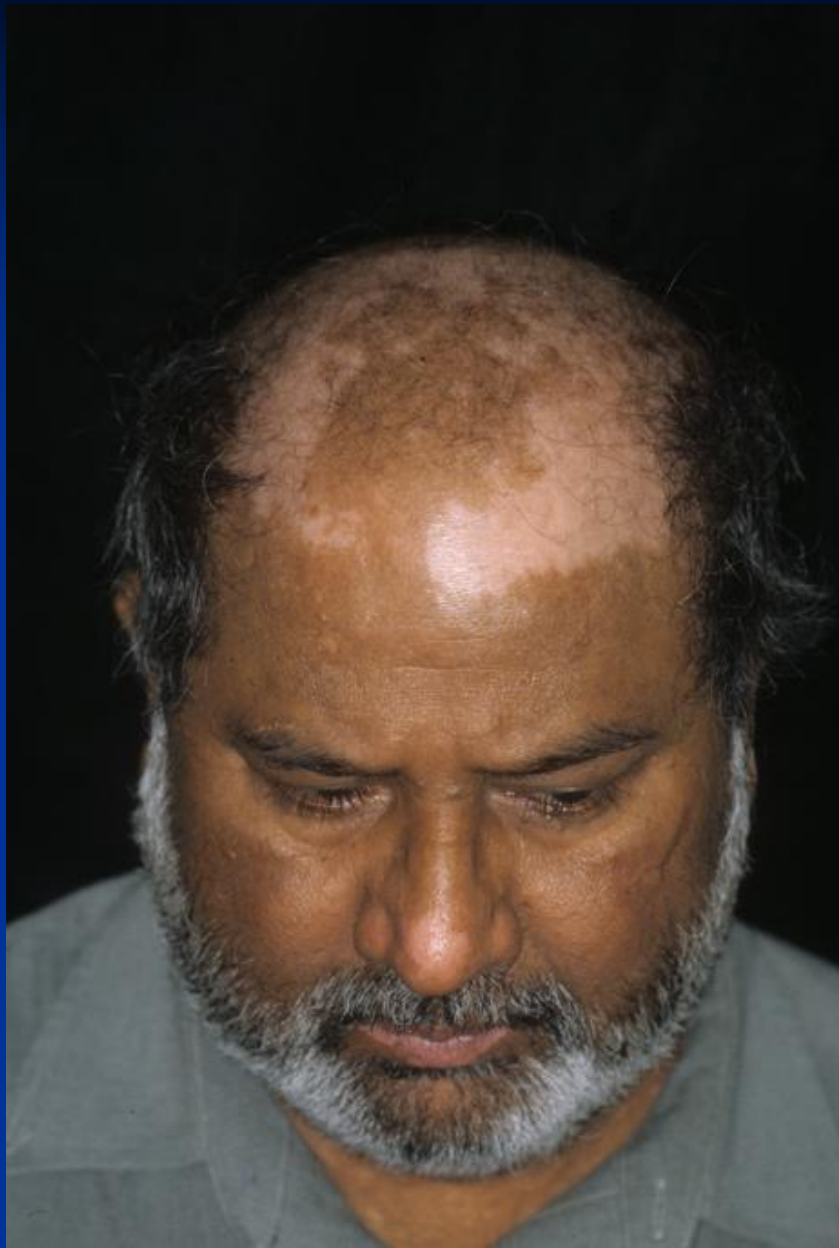




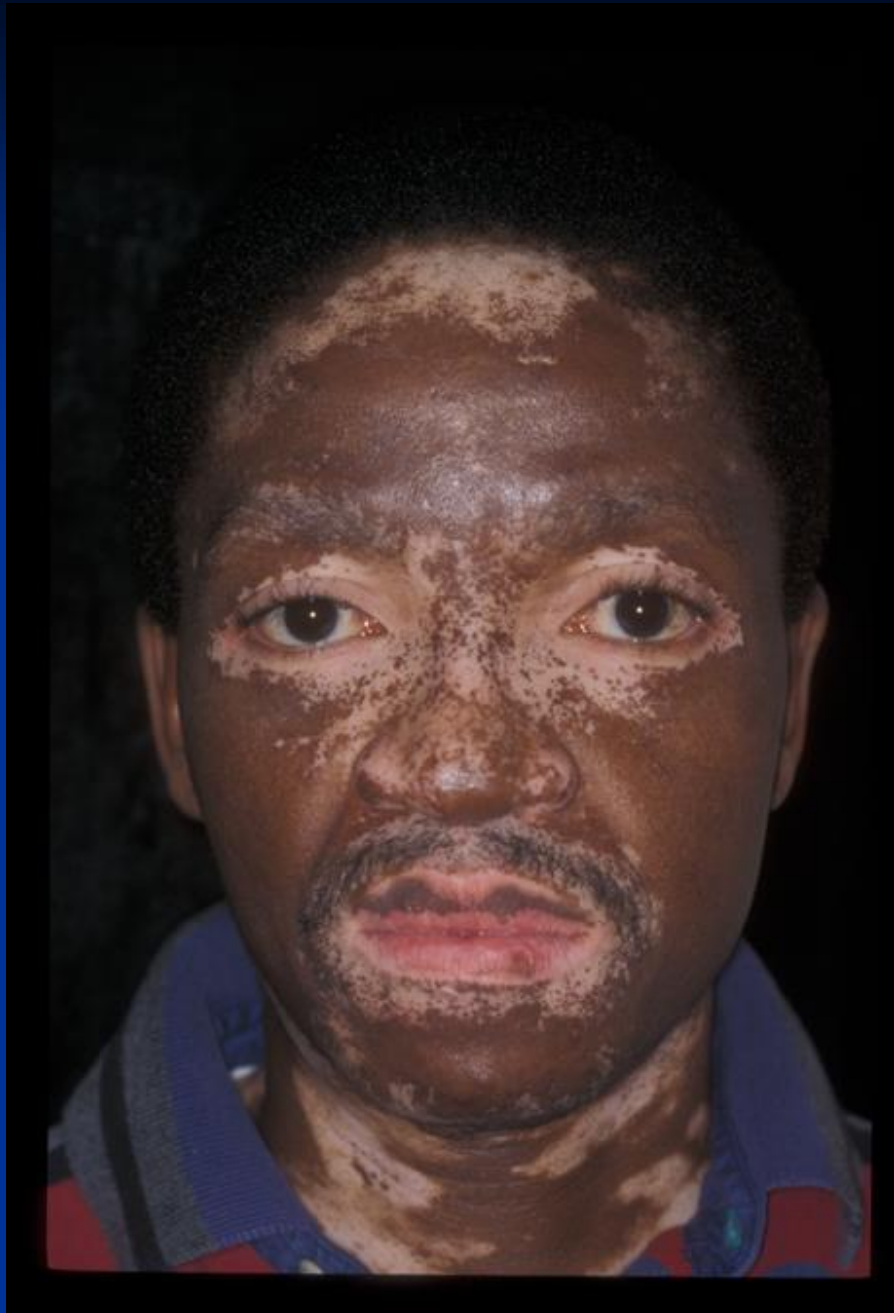




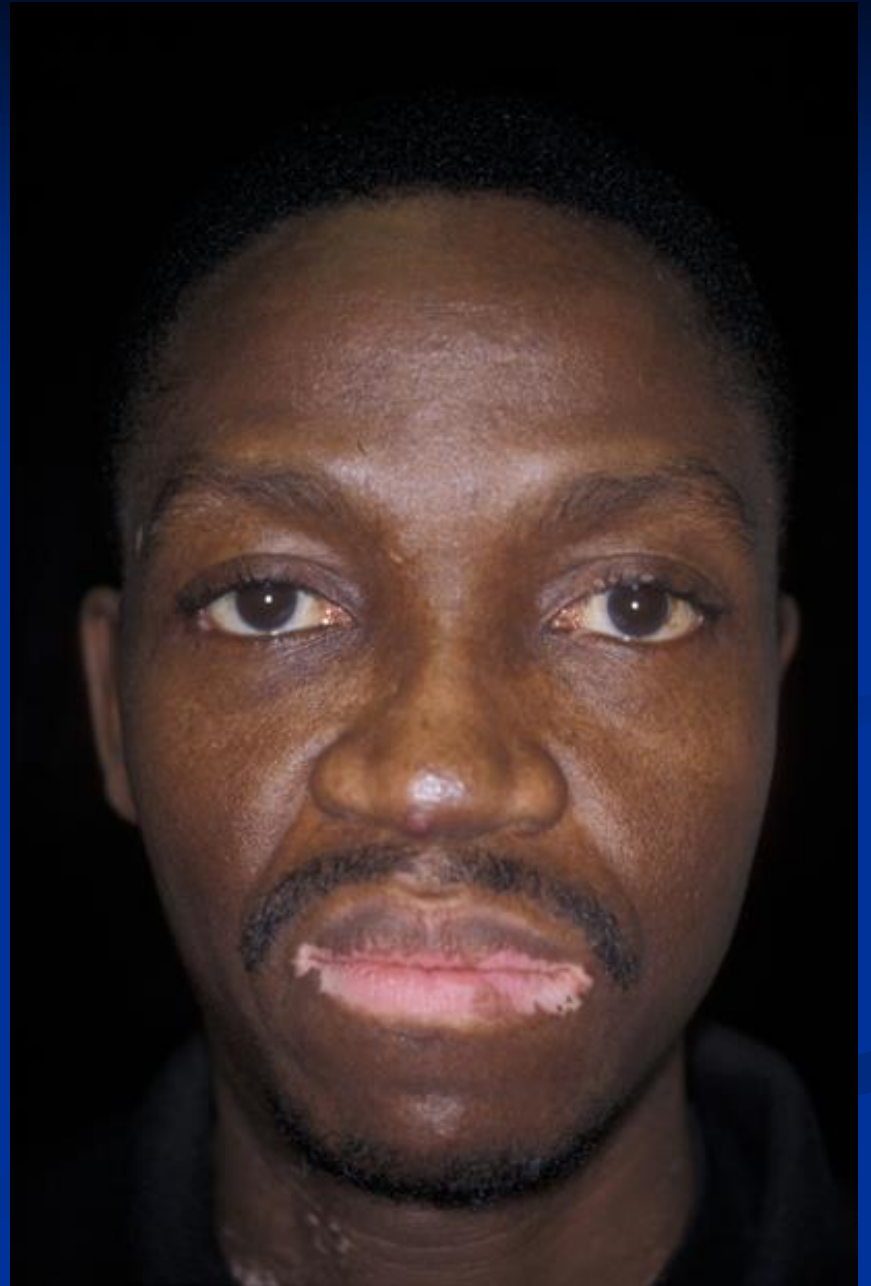




















Patient Handouts

KellyK@CrutchfieldDermatology.com

Dermatology Times

The Leading Newsmagazine for Dermatologists

September 2009
Vol. 30, No. 9

www.dermatologytimes.com
Part of the Modern Medicine

The Big Picture, Vitiligo Treatment Success

Phototherapy, topical combinations help improve vitiligo

By Nancy A. Melville
Staff Correspondent

Eagan, Minn. — Advances in phototherapy continue to give dermatologists powerful new options for the treatment of vitiligo, and while there still is no cure for the condition, phototherapy, along with creative new treatment combinations, is offering increasingly successful results.

Along with narrowband UVB, for example, there is the excimer laser, which has a wavelength of 308 nm, which is close to UVB's 311 nm to 313 nm.

"The excimer laser is exciting, because its wavelength is very close to narrowband UVB, and it offers some of the same potent anti-inflammatory results," says vitiligo expert Charles Crutchfield, M.D., adjunct clinical associate professor of dermatology, University of Minnesota Medical School, Eagan, Minn.

The excimer laser allows for the targeting of specific areas, which can be beneficial in places such as the face, but it can be a disadvantage when there is extensive depigmentation. Also, the excimer can be very expensive, and insurance coverage is not yet common.

Gold standard

The current gold standard for treatment, narrowband UVB phototherapy, offers a potent anti-inflammatory effect, and, if used appropriately, doesn't pose the side effect risks of sunburn or nausea and the increased cancer risk later in life, which were a concern with the previous phototherapy treatment of choice, UVA phototherapy with psoralen (PUVA).

And with results that can appear within two to three months, UVB has the advantage

"The excimer laser is exciting, because its wavelength is very close to narrowband UVB."

Charles Crutchfield, M.D.
University of Minnesota Medical School
Eagan, Minn.

of creating faster improvement than PUVA treatment, which can take a year or longer.

With both narrowband UVB and excimer laser treatments, Dr. Crutchfield says that he starts very lightly, with a low dose, and gradually increases exposure for the best results.

"I treat patients of all skin tones as if they are Caucasian, and start them out at about 100 mJ/cm² and gradually increase the exposure in increments of only about 10 to 15 joules," Dr. Crutchfield says.

"The same with excimer — I start with a low exposure and then work my way up," he says.

Repigmentation

Repigmentation with phototherapy can progress faster in some areas of the body than others.

"It's been my experience that the first repigmentation will show up on the face, followed by the neck, arms and trunk," Dr. Crutchfield says.

"The last, most difficult area to repigment is often the back of the hands and the top of the feet. For some reason, those areas are ultra-stubborn."

"Still, repigmentation on the face can show up in one to three months, and patients are usually thrilled about that," he says.



Topical treatments

Topical treatments, including topical steroids and nonsteroidal topical immunomodulators, still play a big role in vitiligo treatment, and Dr. Crutchfield says he sees the best results when they are combined with phototherapy.

"The standard treatment I use when I have a patient with vitiligo over the age of 6 is I'll put them on narrowband phototherapy, and I use three topicals — a topical steroid that is a Class IV, like Westcort (hydrocortisone valerate 0.2 percent, Westwood-Squibb), combined with 2 percent salicylic acid; and a topical nonsteroidal anti-inflammatory, such as Protopic (tacrolimus, Astellas) or Elidel (pimecrolimus, Novartis), because it's steroid-sparing," he says.

"In some younger patients, I'll use Protopic just three times a day, with or without phototherapy," Dr. Crutchfield says.

The salicylic acid helps give a boost to the steroid, he adds.

"It's a little-known, older pearl, but what salicylic acid does is it drives the steroid down deeper in the skin to provide a better effect," Dr. Crutchfield says.

The third topical Dr. Crutchfield uses is a topical vitamin D containing ointment or cream such as Dovonex (calcipotriene, Westwood-Squibb) or Vectical (calcitriol, Galderma).

Dr. Crutchfield says he has seen impres-

quick read

Topical and phototherapy treatment options for vitiligo are increasing, and one expert says he combines modalities.

Aesthetic Dermatology

















Patient Handouts

KellyK@CrutchfieldDermatology.com

m



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).

Some common skin disorders observed in skin of color

| | | |
|---|--|--|
|  Acne with post-inflammatory hyperpigmentation |  Keloids |  Pseudofolliculitis |
|  Vitiligo |  Lichen nitidus on abdomen |  Dermatitis papulosa nigra |
|  Mongolian spot |  Pityriasis alba |  Pityriasis rosea, papular type |
|  Tinea corporis |  Acanthosis nigricans |  Acne keloidalis nuchae |

Post-inflammatory hyperpigmentation and hypopigmentation

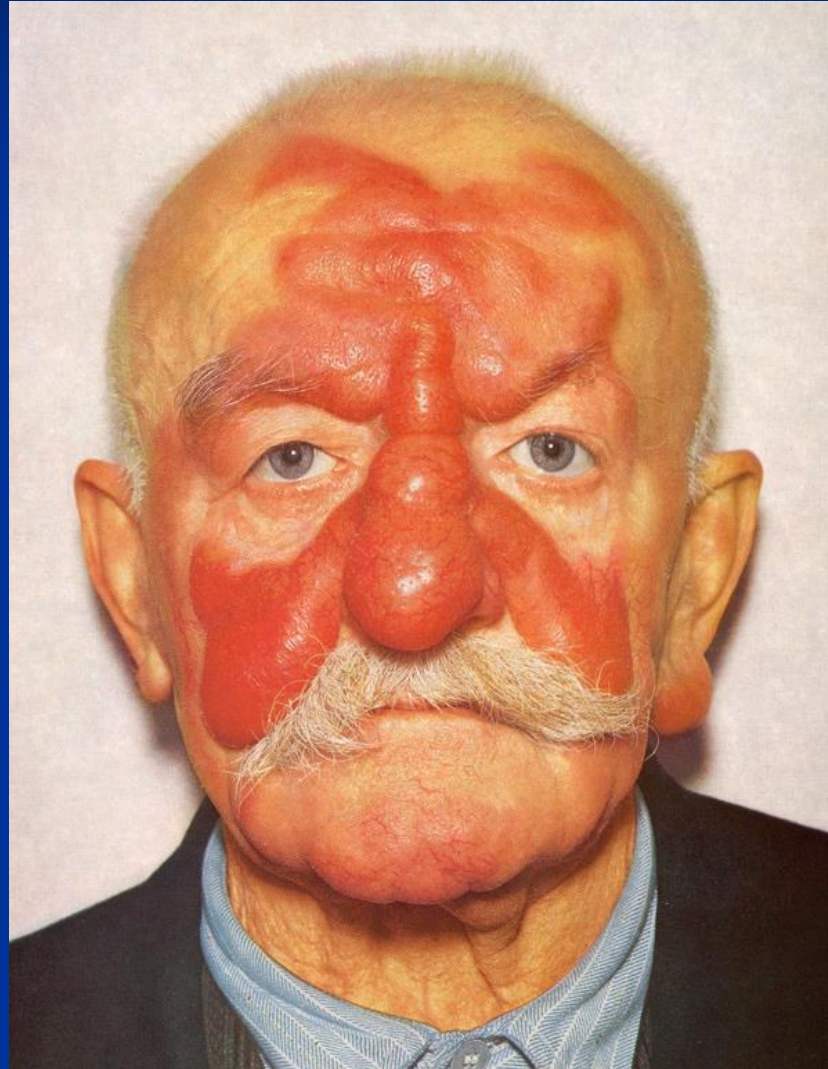
Melanocytes are very sensitive cells and can either stop producing color or produce excessive color in cases of inflammation. Normally, in children, the cells stop producing color (I explain to parents that the cells tend to go to sleep), especially in irritation of the diaper area. It is very common 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 postinflammatory hyperpigmentation. This is most commonly seen in areas where acne blebules heal, leaving a dark spot behind. These too will fade with time; however, it can be quite persistent.

Dr. C, Please help me get my skin in shape I
am getting married in October!



Don't' Forget

Case of the Month

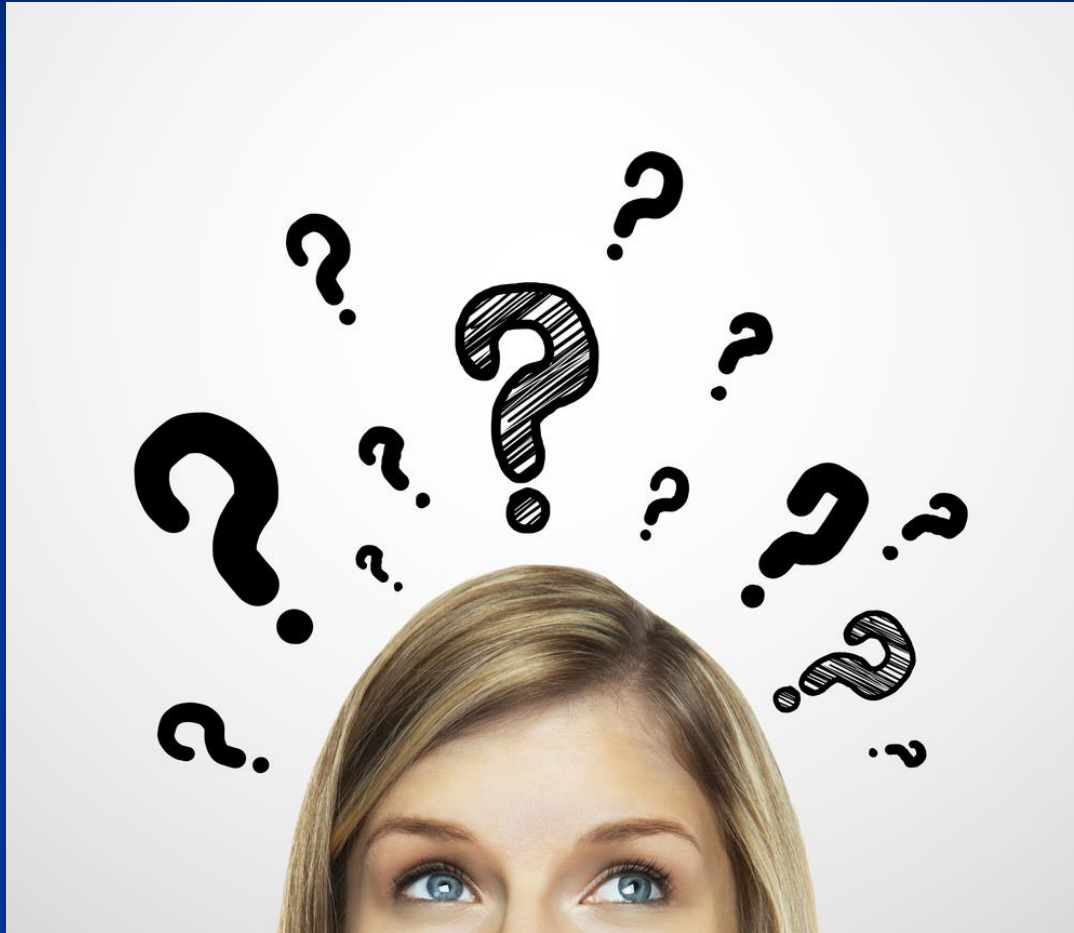


I love “Curbside” Calls!

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Questions, Tough Cases



Thanks



