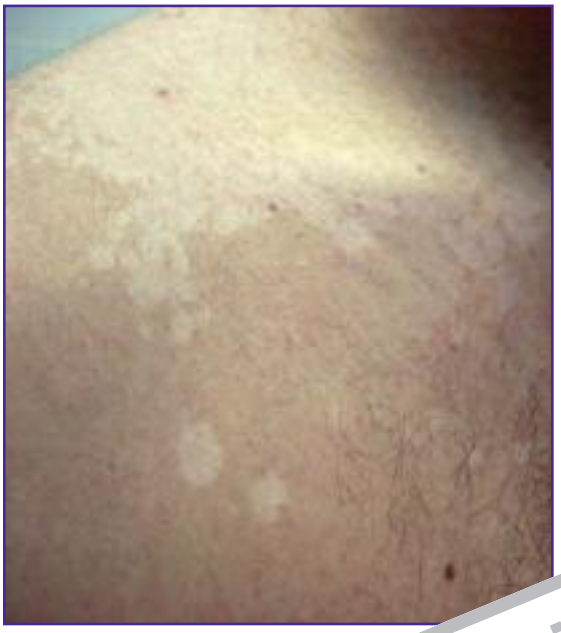
Photo Diagnosis

Illustrated quizzes on problems seen in everyday practice

Case 1: Roger's Rash



Roger, 35, presents with a hypopigmented rash that he gets every summer. He is bothered by the appearance and wishes the rash would go away.

Questions

1. What is the diagnosis?
2. What is the cause of this condition?
3. How is this condition treated?

Answers

1. Pityriasis (formerly tinea) versicolour.
2. This superficial fungal infection is caused by *Malassezia* species overgrowth.
3. Usually topical therapy with selenium sulphide, zinc pyrithione, or azole and allylamine antifungals are sufficient. Less commonly, oral azole antifungals are used.

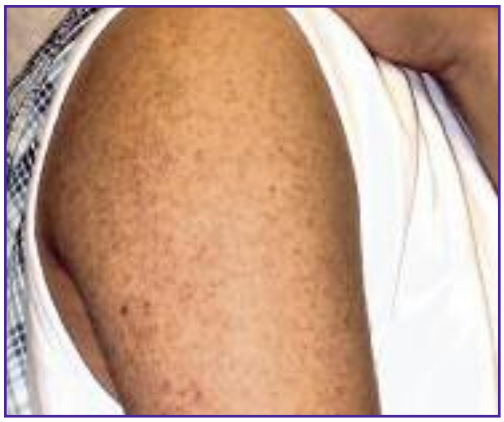
Provided by: Dr. Benjamin Barankin

Share your photos and diagnoses with us!

Do you have a photo diagnosis? Send us your photo and a brief text explaining the presentation of the illness, your diagnosis and treatment and receive $25 per item if it is published.

The Canadian Journal of Diagnosis
955, boul. St. Jean, Suite 306
Pointe-Claire, Quebec H9R 5K3
E-mail: diagnosis@sta.ca
Fax: (888) 695-8554

Case 2: Blaze's Blemishes



Blaze, 17, presents with numerous keratotic papules on both arms.

Questions

1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

Answers

1. Keratosis pilaris.
2. Keratosis pilaris is characterized by the presence of minute, discrete, keratotic, follicular papules with variable perifollicular erythema. The lesions are not grouped and show no tendency to coalesce to form plaques. The affected skin looks like goose flesh and feels like sandpaper. The lesions are not pruritic. Keratin plugs cannot be expressed with pressure and are usually painless. The lesions can be isolated or widespread and have a predilection for the lateral aspects of the upper arms and thighs.
3. Prevention of excessive skin dryness is helpful. This can be accomplished by a reduction in the frequency of skin cleansing, brief, tepid showers rather than long, hot baths, use of mild soaps and humidification of the air in the home.

   In mild cases, a moisturizing cream or an emollient, such as hydrophilic petrolatum or a 10% to 20% urea cream usually alleviates the rough surface. More pronounced or widespread lesions require treatment with a keratolytic agent, such as lactic acid, salicylic acid, or urea in combination with a topical corticosteroid or retinoic acid.

Provided by: Dr. Alexander K. C. Leung; and Dr. Alex H. C. Wong

Case 3: Tamara's Tongue

This condition is not always severe, but there is usually some degree of atrophy of the lingual papillae which is often associated with angular stomatitis and facial pallor.

Tamara, 62, is a diabetic who presents with complaints of a constant sensation of tongue burning.

Questions

1. What is the diagnosis?
2. What is the significance?

Answers

1. Glossitis is an acute or chronic inflammation of the tongue. The condition may exist either as a primary disease or a symptom of another disorder.
2. Glossitis is not always severe, but there is usually some degree of atrophy of the lingual papillae which is often associated with angular stomatitis and facial pallor.

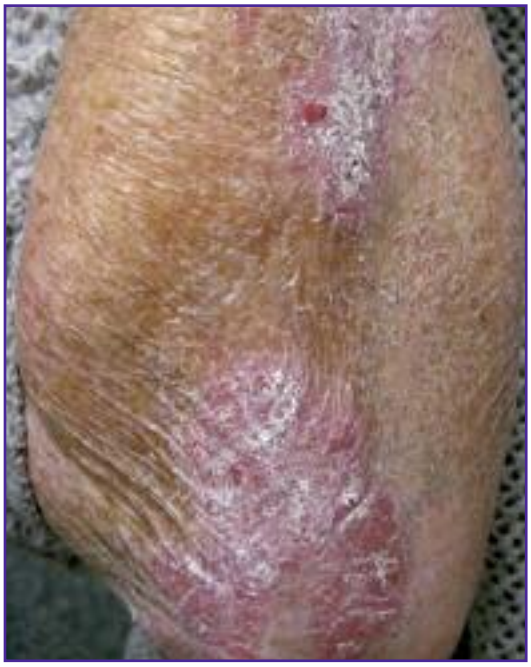
   Although iron and vitamin B12 deficiency states are comparatively more common, the differential diagnosis of a sore, red and smooth tongue should also include a deficiency of:
   - riboflavin,
   - niacin,
   - folic acid and
   - pyridoxine.

   Sometimes anticancer treatment may produce a similar appearance.

   A deficiency of more than one vitamin is much more likely to cause glossitis and the loss of papillae may be observed in patients with malabsorption, pellagra and scurvy (caused by malnutrition in nutritionally-deprived patients).

Provided by: Dr. Jerzy Pawlak

Case 4: Scarlett's Scales



Scarlett, 55, presents with a 20-year history of mildly pruritic scaly red plaques on her arms and shins. She has no arthritis, nor any family history of skin disease.

Questions

1. What is the diagnosis?
2. What area of the body is least likely to be affected by this condition?
3. Is arthritis commonly associated with this condition?

Answers

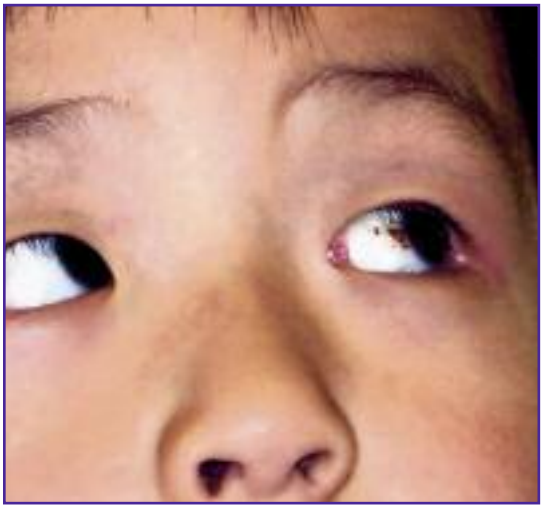
1. Psoriasis is an inflammatory skin condition with well-defined erythematous plaques with silvery scale.

   Potent topical steroids and topical calcipotriol are used for mild-to-moderate skin disease. Systemic therapy is often needed for moderate-to-severe disease.
2. The face is the area least likely affected, while the elbows, knees and scalp (extensor surfaces) are the areas most commonly affected.
3. Psoriatic arthritis affects 20% to 30% of patients with psoriasis, typically following cutaneous disease.

Provided by: Dr. Benjamin Barankin

The face is the area least likely affected by this condition.

Case 5: Leonel's Lesions



These lesions are the most common pigmented lesions in the conjunctiva and are usually present from birth.

Leonel, seven-years-old, presents with pigmented lesions on his left eye. The lesions have been present since birth.

Questions

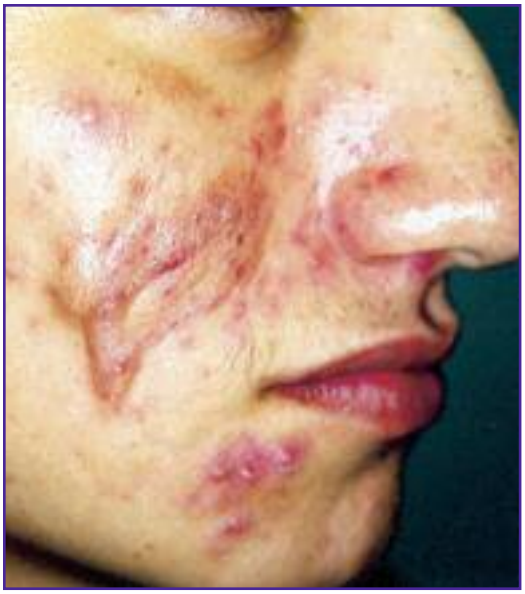
1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

Answers

1. Conjunctival nevi.
2. Conjunctival nevi are the most common pigmented lesions in the conjunctiva and are usually present from birth. The lesions are tan-to-brown and move with the conjunctiva. In contrast, the lesions of scleral melanocytosis are black or gray-blue and are fixed (do not move with the conjunctiva).
3. No treatment is necessary for this condition. The lesions usually involute with time.

Provided by: Dr. Alexander K. C. Leung; and Dr. W. Lane M. Robson

Case 6: Adam's Acne



Adam, 21, presents with a long history of acne. He is embarrassed by his complexion and comes to you for treatment.

Questions

1. What is the treatment in his case?

Answers

1. Adam has typical severe acne on his cheeks showing:
   - inflamed papules,
   - scars and
   - cystic lesions.

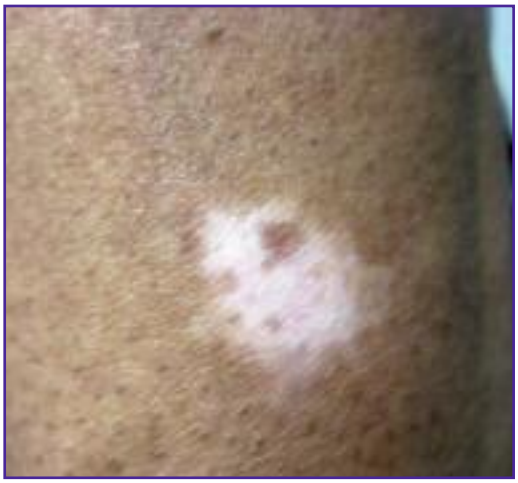
   He can be treated with:
   - Oral antibiotics:
     - Tetracycline
     - Minocycline
   - Topical antibiotics
     - Clindamycin
     - Erythromacin
   - Benzoyl peroxide gel (5% or 10%)

   If no improvement is seen, oral isotretinoin treatment can be perscribed.

Provided by: Dr. Jerzy Pawlak

Typical severe acne consists of inflamed papules, scars and cystic lesions.

Case 7: Mallory's Marks



Mallory, 44, presents with a well-defined area of depigmentation on her arm. She has similar lesions on her hands and around her mouth. There is a family history of pernicious anemia.

Questions

1. What is your diagnosis?
2. With which conditions has this diagnosis been associated?
3. How might you treat this condition?

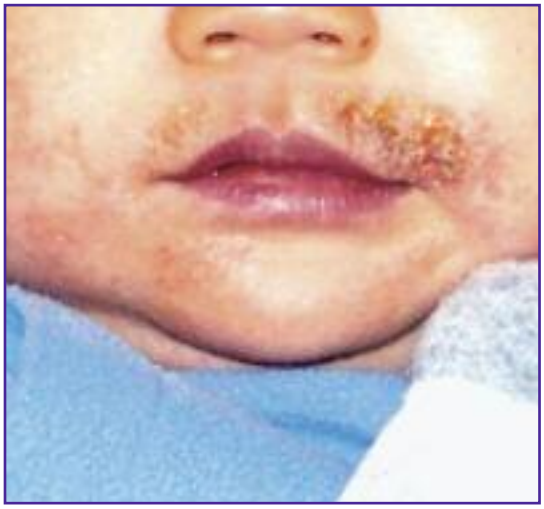
Answers

1. Vitiligo. This is an acquired progressive skin depigmentation of the epidermis (leukoderma).
2. Vitiligo has been associated with other autoimmune diseases including:
   - thyroid disease,
   - diabetes,
   - pernicious anemia,
   - alopecia areata and
   - Addison's disease.
3. Potent topical steroids, intralesional steroids, topical immunomodulators, or phototherapy are possible treatment options.

This condition has been associated with other autoimmune diseases including: thyroid disease, diabetes, pernicious anemia, alopecia areata and Addison's disease.

Provided by: Dr. Benjamin Barankin

Case 8: Owen's Outbreak



A bacterial infection, most commonly with Staphylococcus aureus, *is the main complication of this condition.*

Owen, 16-months-old, presents with his parents who are concerned about his very itchy perioral rash.

Questions

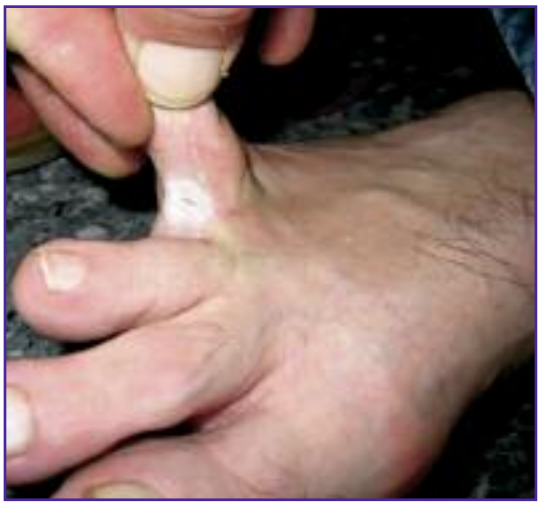
1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

Answers

1. Owen has atopic dermatitis complicated by a secondary bacterial infection.
2. A bacterial infection, most commonly with *Staphylococcus aureus*, is the main complication of atopic dermatitis. Other potential complications include:
   - eczema herpeticum,
   - chronic blepharitis,
   - keratoconjunctivitis,
   - post-inflammatory hypopigmentation and
   - impaired quality of life.
3. Treatment consists of optimal skin care and the use of a topical corticosteroid. Topical antibiotics, such as mupirocin or fusidic acid are useful to treat impetiginized lesions.

Provided by: Dr. Alexander K. C. Leung; and Dr. W. Lane M. Robson

Case 9: Frederick's Feet



This is a dermatophyte infection of the plantar surfaces of the feet and interdigital spaces.

Frederick, 48, is a runner who presents with pruritus affecting his feet. He has repeatedly tried to moisturize his "dry feet," but they do not seem to improve.

Questions

1. What is the diagnosis?
2. What are the most common organisms causing this condition?
3. What are the four main subtypes of this condition?

Answers

1. Tinea pedis is a dermatophyte infection of the plantar surfaces of the feet and interdigital spaces.

   Topical antifungals are sufficient treatment for most cases of tinea pedis.
2. The most common organisms causing this condition are:
   - *Trichophyton rubrum*,
   - *Trichophyton mentagrophytes* and
   - *Epidermophyton floccosum*.
3. The four main subtypes of this condition are:
   - interdigital (usually between the fourth and fifth toes),
   - moccasin-type (chronic hyperkeratotic),
   - vesicular and
   - ulcerative. Dx

Provided by: Dr. Benjamin Barankin