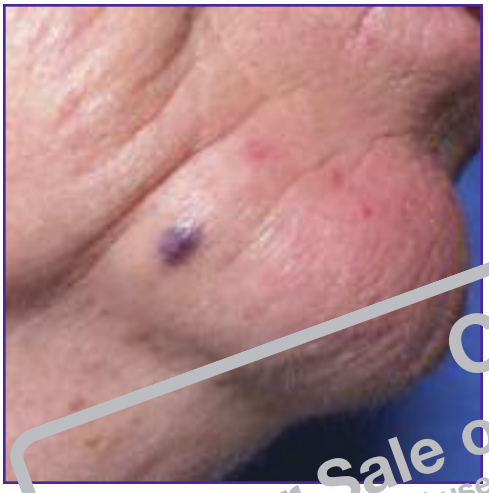
Illustrated quizzes on problems seen in everyday practice

Case 1



Dark Blue Chin Papule

This 79-year-old woman presents with a dark blue papule on her chin.

Questions

1. What is the diagnosis?
2. What are the clinical findings?
3. What is the treatment?

Answers

1. This patient has a venous lake. A venous lake is a benign vascular lesion, usually occurring on the face, lips, or neck of adults over 50-years-of-age.
2. Patients typically present with a smooth, compressible, dark blue-to-violet papule or plaque. Venous lakes may mimic malignant lesions, such as nodular melanoma and pigmented basal cell carcinoma. Dermoscopy may be useful for differentiating venous lakes from pigmented lesions. Referral to a dermatologist is recommended to confirm the diagnosis, if the lesion is atypical or if diagnostic uncertainty exists.
3. Although venous lakes are benign lesions, biopsy may be recommended to confirm the diagnosis in atypical cases. Lesions may be removed for cosmetic reasons using pulsed dye laser therapy.

Provided by: Ms. Lesley Latham, and Dr. Richard Langley

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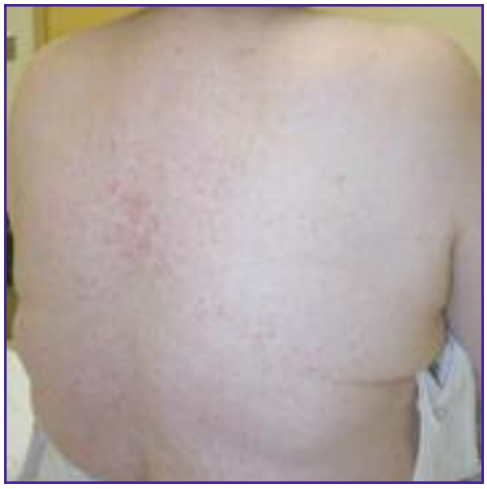
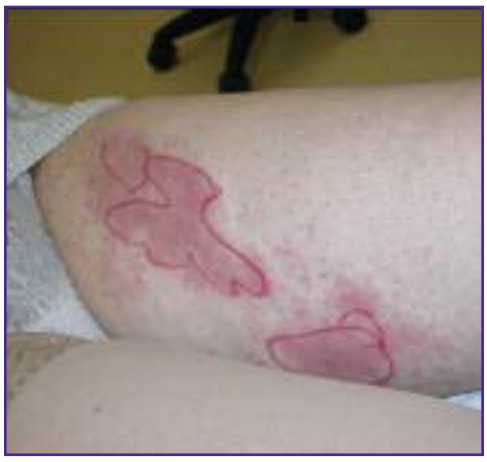
Case 2





Right Leg Cellulitis

A 45-year-old woman known to have type 2 diabetes came to Emergency with right leg cellulitis. She was put on p.o. ciprofloxacin and IV clindamycin at home. She came back a few days after with generalized pruritic eruption which had begun 24 hours before.

Questions

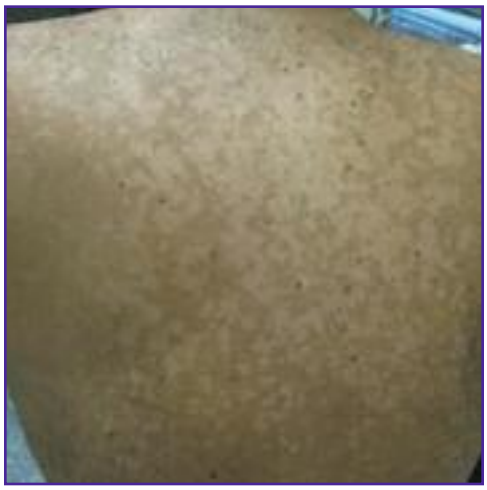
1. What is the diagnosis?
2. What is the treatment?

Answers

1. Allergic skin eruption to clindamycin.
2. Stop the clindamycin and switch to another antibiotic. Antihistamines should also be prescribed to diminish the itching.

Provided by: Dr. Jean-François Roussy

Case 3



Pruritic Back Eruption

A 24-year-old male presents with a mildly pruritic eruption on his back and chest, of several months duration.

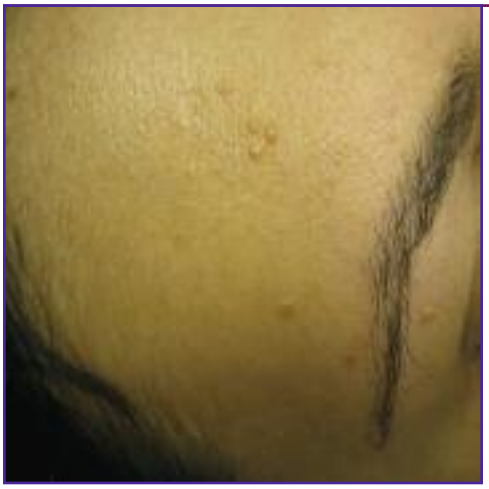
Questions

1. What is the diagnosis?
2. What is the causative organism?
3. How would you treat this condition?

Answers

1. Tinea or pityriasis versicolour
2. *Malassezia furfur* or *Malassezia globosa*
3. Topical selenium sulfide or zinc pyrithione can be useful as treatment and as prevention of recurrence. Topical antifungals that contain terbinafine, ciclopirox olamine or ketoconazole for two or three weeks are very effective, though recurrence in hot and humid climates is common. Normalization of skin dyspigmentation can take six to eight weeks.

Provided by: Dr. Benjamin Barankin



Case 4

Facial Warts

A 32-year-old female presents with flesh-coloured, asymptomatic papules on her face.

Questions

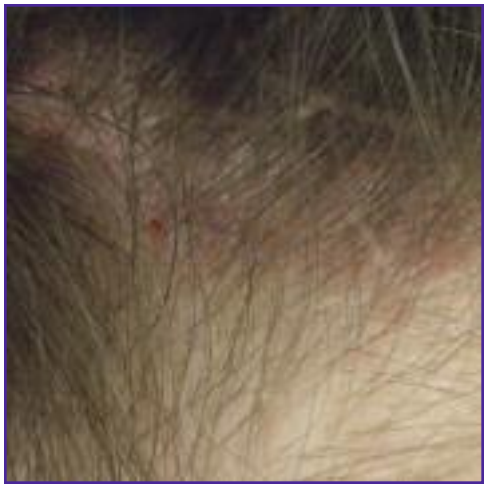
1. What is the diagnosis?
2. What are the three types of this lesion?
3. How might you manage this patient?

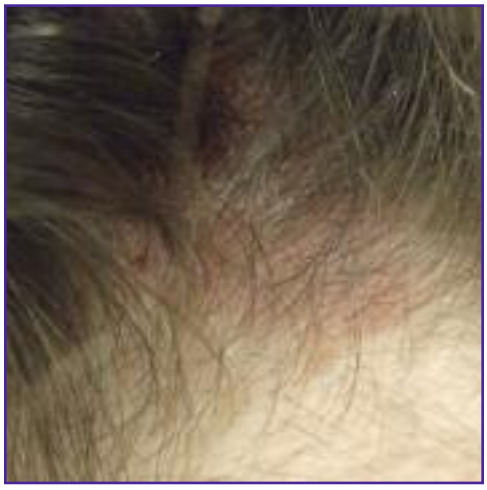
Answers

1. Facial warts, or flat warts
2. Plantar warts, flat warts (on the face or back of hands), and common warts (hands & periungual).
3. Liquid nitrogen cryotherapy or electrodessication are good treatment options. Topical imiquimod and topical retinoids can also be considered, and there may be a benefit to an oral zinc supplement.

Provided by: Dr. Benjamin Barankin

Case 5





Itchy Scalp Lesions

A 26-year-old female presents with a five year history of intermittent, scaly, red, and itchy lesions located on her scalp. She has no other skin lesions or joint pains. Upon physical examination, the patient has dry, red patches with a whitish scale at the base of the scalp.

Questions

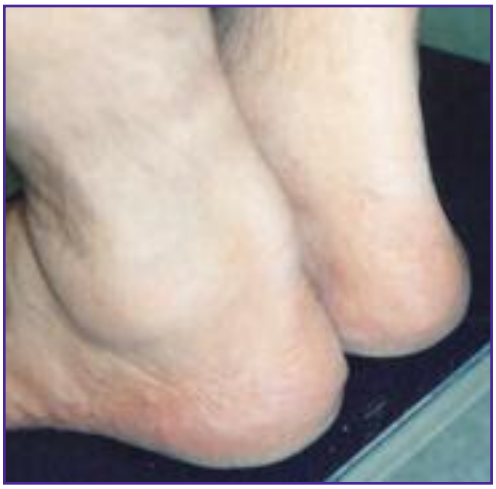
1. What is the diagnosis?
2. What is the treatment?

Answers

1. Psoriasis can be described as a chronic inflammatory, autoimmune disease that is mainly manifested as a skin condition. Rapid reproduction of skin cells leads to the formation of red, scaly, dry patches of thickened and raised skin. The areas most commonly affected include the extensor surfaces of elbows and knees, as well as the back. Other areas it may affect include the scalp, ears, intertriginous folds, hands, and nails. Psoriasis has a variable presentation and course, periodically improving and worsening. A combination of immunological, genetic, and environmental factors contribute to the pathophysiology of psoriasis. Currently, there are no specific blood tests used to diagnose psoriasis. The diagnosis depends on the patient's history and the appearance of the lesions on examination. A skin biopsy can be performed, if needed.
2. There are many options to control and treat psoriasis, depending on the severity and the areas of the body involved. This patient was started on calcipotriol with betamethasone dipropionate. Corticosteroids and vitamin D and A analogues are popular options. Other topical treatments include tar, salicylic acid, and hydration products such as aloe vera and petroleum jelly. Systemic medications include methotrexate, cyclosporine, retinoids, such as acitretin, and other newer biologics that modulate the immune system, such as alefacept, adalimumab, infliximab, etanercept, and ustekinumab. Phototherapy and laser treatments may also be considered in some cases.

Provided by: Dr. Diego Rojas, and Dr. Karen Choi

Case 6



Achilles Tendon Pain

A 55-year-old man presented with a history of pain during various activities, over the posterior part of his left Achilles tendon. This part of his tendon is tender, swollen, and the crepitus can palpate with any motion of the tendon.

Questions

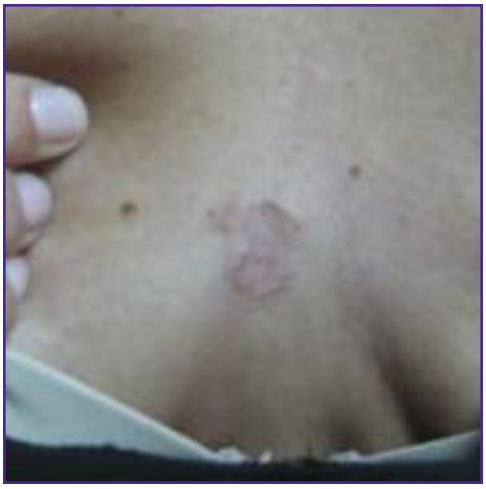
1. What is the diagnosis?
2. What is the significance?

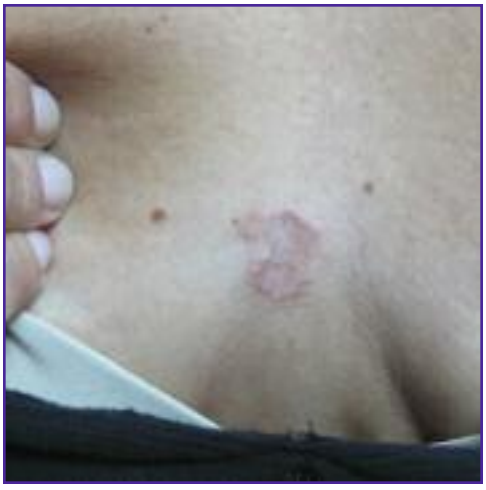
Answers

1. Achilles tendon tenosynovitis
2. The Achilles tendon is a powerful plantar flexor of the foot. The symptoms of tendonitis are pain aggravated by activity. There is often point tenderness over the affected structure, and there may be crepitus if there is tenosynovitis. Pain is often aggravated by resisted motion.

Provided by: Dr. Jerzy Pawlak

Case 7





Asymptomatic Chest Lesion

A healthy, 31-year-old female notices an asymptomatic annular lesion on the chest of three months duration. It was treated as tinea corporis with topical terbinafine cream for one month, but showed no improvement.

Questions

1. What is the diagnosis?
2. What is the investigation?
3. What is the management?

Answers

1. Localized granuloma annulare
2. Biopsy may be necessary for lesions that are atypical in presentation (*e.g.*, those which are painful or located atypically on the body). Otherwise, a lesion is recognized based on its characteristic appearance, and no specific investigation is necessary.
3. No treatment is required in some cases, as the lesions disappear spontaneously in a few months. Persistent lesions may be treated with potent topical corticosteroids, intralesional corticosteroid injections, or cryotherapy. Topical imiquimod and topical calcineurin inhibitors have been reported to be efficacious in individual cases.

Provided by: Dr. Francesca Cheung

Case 8

Crusted Face Lesions

A five-year-old girl presents with multiple, crusted lesions on the face. She is afebrile.

Questions

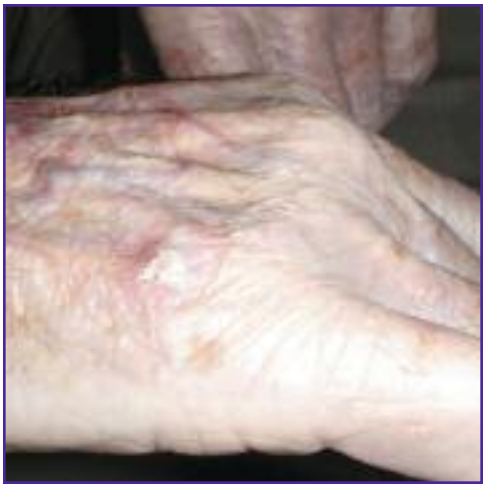
1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

Answers

1. Nonbullous impetigo (also known as impetigo contagiosa or crusted impetigo)
2. Impetigo is a superficial, highly contagious, bacterial skin infection, characterized by a localized inflamed and infected epidermis. There are two classic forms of impetigo, namely, nonbullous impetigo and bullous impetigo. The former accounts for more than 70% of cases. Nonbullous impetigo is caused by *Staphylococcus aureus* and/or group A ß-hemolytic streptococci. The condition is most frequently seen in children aged two to five years. Nonbullous impetigo typically begins as a small, 2 to 4 mm erythematous macule, which soon becomes vesicular. The vesicle then ruptures, leaving an exudate with a characteristic yellowish-brown or honey-coloured "stuck-on" crust over the superficial erosion. Removal of the crust results in the reaccumulation of fresh exudates. Satellite lesions typically appear in the vicinity as a result of spread by autoinoculation. Coalescence of lesions produces a wider area of involvement. Nonbullous impetigo most commonly occurs on the face. Constitutional symptoms, such as fever, malaise, and anorexia are generally not present, and pruritus and pain are uncommon. Regional lymphadenopathy is often present.
3. For mild infections, topical mupirocin or fusidic acid t.i.d. is the treatment of choice. For severe, widespread, or recurrent infections, oral antimicrobials effective against *Staphylococcus aureus* and group A ß-hemolytic streptococci should be used.

Provided by: Dr. Alexander K.C. Leung, and Dr. Justine H.S. Fong

Case 9



Conical Lesion

A 94-year-old man presents with a hard, scaly, conical lesion on his right hand.

Questions

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

Answers

1. Cutaneous horn
2. A cutaneous horn is a conical build-up of keratin on a wart, seborrheic keratosis, actinic keratosis, or squamous or basal cell carcinoma. It commonly presents on areas that are exposed to sunlight, such as the face, ears, and hands.
3. Treatments include cryotherapy or local excisional biopsy for pathologic diagnosis. Appropriate therapy is then initiated depending on diagnosis.

Provided by: Dr. Andrea Herschorn, and Dr. Charles Lynde

Case 10

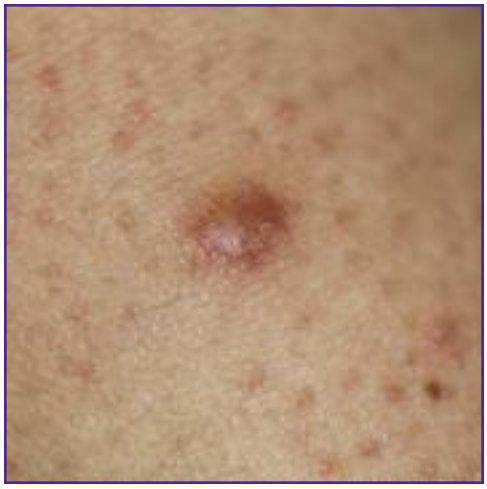


Figure 1: Clinical Photograph

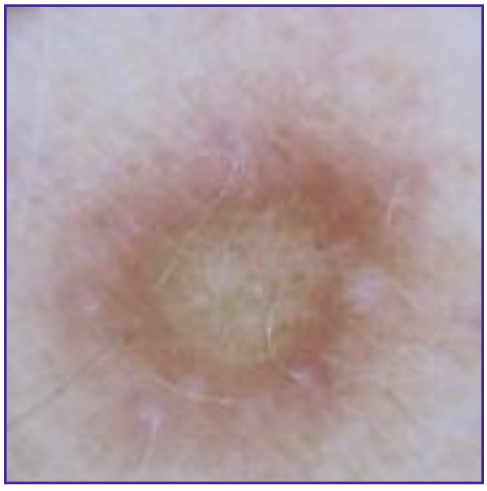


Figure 2: Dermoscopy

Pigmented Papule

A 27-year-old female presents with a well-circumscribed, reddish-brown papule on her left upper arm.

Questions

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

Answers

1. Dermatofibroma is a common, benign, firm, pink-brown papule or plaque that is frequently found on the anterior surface of the lower legs of young women. Lateral compression causes dermatofibromas to retract beneath the skin ("dimple sign").
2. The cause of dermatofibromas is not certain, but they may represent a fibrous reaction to trauma, or an insect bite. Examination of dermatofibromas by dermoscopy reveals a central, white patch surrounded at the periphery by a uniform, pigmented network.
3. Given the benign nature of dermatofibromas, no treatment is required. If desired, a patient may request to have the lesion excised for cosmetic reasons.

Provided by: Ms. Jessica Corbin, and Dr. Richard Langley

Case 11

Itchy Plaque on Back

A 60-year-old, otherwise healthy male presents with a solitary, 1.5 cm, mildly itchy, erythematous plaque on his back.

Questions

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

Answers

1. Superficial basal cell carcinoma
2. Basal cell carcinoma is the most common skin cancer in the Causcasian population. Morphological classification of basal cell carcinoma includes superficial, nodular, morpheaform, cystic and micronodular. Superficial basal cell carcinoma usually presents as an erythematous, slightly scaly, thin plaque, mostly on the trunk and the extremities (but it can also occur on the head and neck). The most important risk factor is chronic ultraviolet radiation exposure. Other risk factors include genetic predisposition, exposure to arsenic, ionizing radiation, and trauma. Dermoscopy may show typical features such as shiny white-to-red areas, telangiectasia, and erosions. Superficial basal cell carcinomas rarely metastasize and tend to expand horizontally rather than vertically.
3. For high-risk lesions (those on the head, neck, hands or feet), surgical intervention is required. For low-risk lesions (those on the trunk and extremities), electrodessication and curettage, or topical pharmacological therapy (*e.g.*, imiquimod or 5-fluorouracil once daily, five times per week for six weeks) can be considered. Careful follow-up every six months is initially essential. Dx

Provided by: Dr. Alex Wong, Dr. Ernesto Gonzalez, and Dr. Alexander K.C. Leung