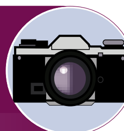
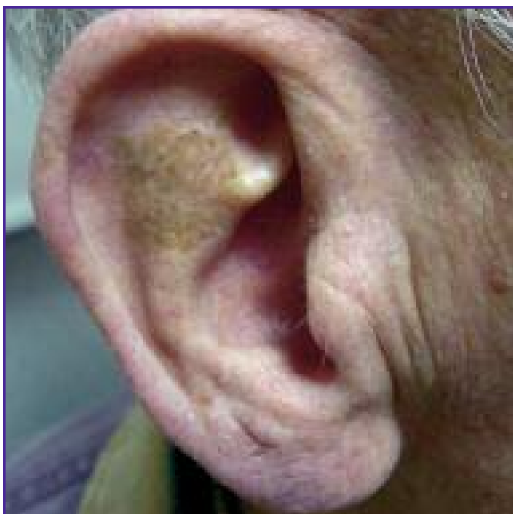


Illustrated quizzes on problems seen in everyday practice

Case 1: Bruce's Brown Plaque



Bruce, 78, presents with a slowly-enlarging brown plaque on his ear. He has a history of actinic keratoses and basal cell carcinoma on his cheek. Otherwise, he is fit. He currently takes atorvastatin for high cholesterol.

Questions

1. What is the diagnosis?
2. What is the variant of this lesion that develops in dark-skinned individuals on the face?
3. How would you treat this lesion?

Answers

1. Seborrheic keratosis. This is the most common benign tumour (epidermal proliferation) in adults that can have several morphologies.
2. Dermatosis papulosa nigra.
3. This lesion could be treated by:
   - liquid nitrogen cryotherapy,
   - electrodesiccation, or
   - curettage.

Provided by: Dr. Benjamin Barankin

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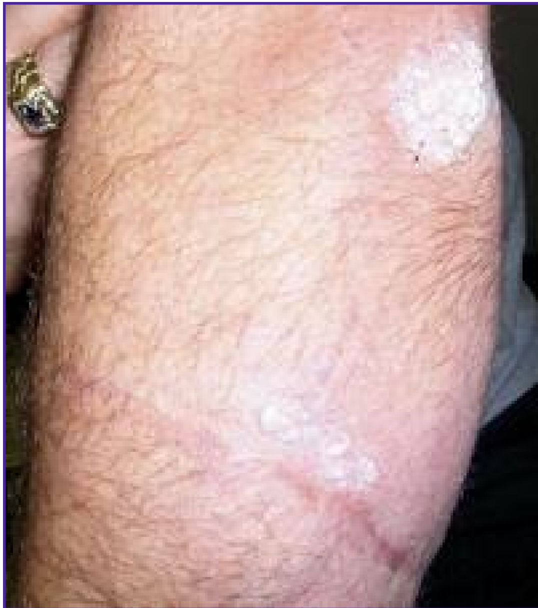
Case 2: Serge's Sore



This lesion is a result of physical trauma resulting in linear plaque formation.

Serge comes to you with a non-itchy skin lesion that has been present on his elbow for the last few years. He became concerned when the lesion started to spread around the scar from an operation which he had four months ago.

Questions

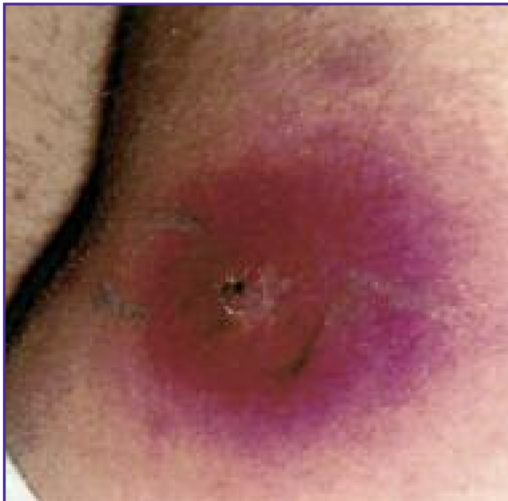
1. What is the initial disease?
2. What is the name of this disease phenomenon?
3. What other diseases show the same phenomenon?

Answers

1. The initial skin disease is psoriasis.
2. The lesion shows the Koebner's phenomenon in which physical trauma (*e.g.*, wounds, tight pressure band, sunburn, scratching) results in linear plaque formation.
3. Many other diseases show the same phenomenon, including:
   - Pityriasis rubra pilaris
   - Lichen planus
   - Lichen nitidus
   - Vitiligo
   - Lichen sclerosis
   - Elastosis perforans serpiginosa

Provided by: Dr. Hayder Kubba

Case 3: Ivan's Infection



The condition is usually caused by group A ß-hemolytic streptococcus.

Ivan, 40, presents with a very painful lesion on the right ankle. The initial lesion was a vesiculated pustule with a red base. The pustule ulcerated and the erythematous base enlarged.

Questions

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

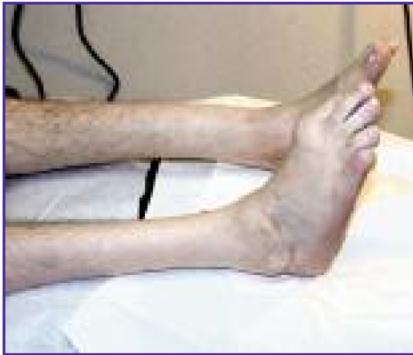
Answers

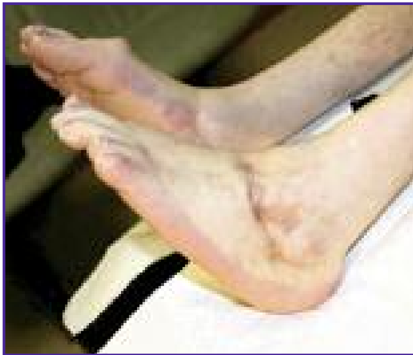
1. Ecthyma.
2. Ecthyma is an ulcerative skin infection that initially resembles impetigo. The lesion ruptures to form an ulcer, which has a punch-out appearance and a necrotic base. The condition is usually caused by group A ß-hemolytic streptococcus. The lesion is most common on the lower extremities and buttocks. Predisposing factors include:
   - Trauma
   - Insect bites
   - Poor hygiene
   - Malnutrition

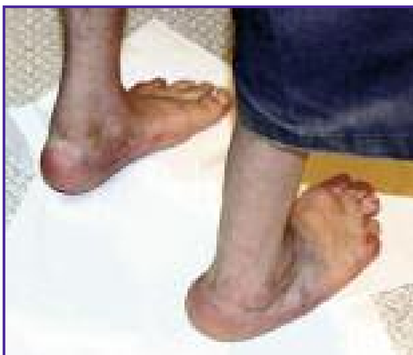
   Complications include cellulitis, lymphangitis and, rarely, poststreptococcal glomerulonephritis.
3. Ecthyma responds well to oral or parenteral penicillin. The eschar should be soaked and gently removed and the lesion should be cleaned at least twice daily.

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

Case 4: Frank's Feet







Frank, 72, was born with a deformity affecting both feet. He has undergone surgical interventions in the past to correct the problem.

Questions

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

Answers

1. Talipes equinovarus (club foot).
2. Clubbed feet are a congenital deformity in which the foot points downwards and is twisted inwards. The cause is unknown although there may be a family history of this condition. A similar deformity can occur in those with spina bifida and arthrogryposis. The deformity, which is obvious at birth, may be unilateral or bilateral.
3. Treatment should start as soon as possible as the foot will rapidly stiffen in the position of deformity. The foot is initially strapped in the corrected position. Several correcting plasters are used as the child grows. If full correction cannot be achieved by strapping, or if there has been no early treatment, a surgical release of tight tissues will be necessary.

Provided by:
Dr. Jerzy Pawlak

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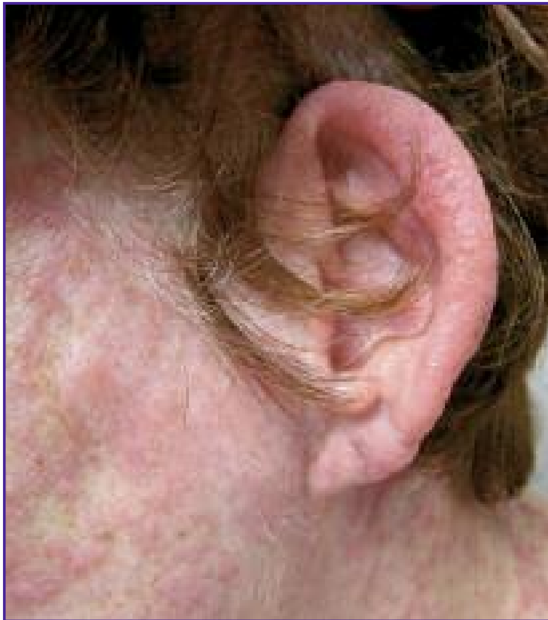
Case 5: Rachel's Rash



Rachel, 40, presents with facial erythema and edema. She has no known food allergies and this problem appeared soon after applying a perfume which she has been using for years without problem.

Questions

1. What is the diagnosis?
2. Are women or men more commonly affected by the condition?
3. How would you manage this patient?

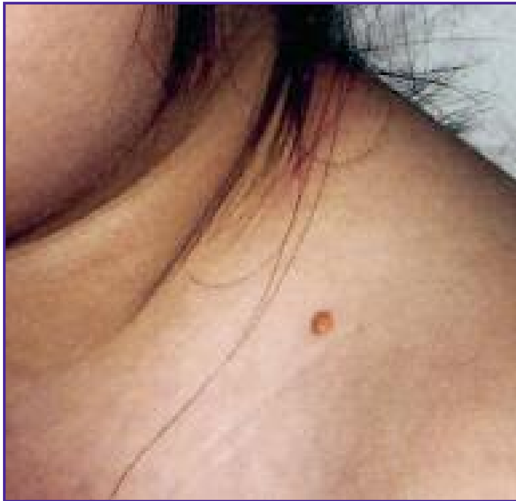
Answers

1. Allergic contact dermatitis to fragrance.
2. Women are more commonly affected by allergic contact dermatitis, mainly owing to the high frequency of nickel allergy among this gender.

   Fragrances are very common allergens. It is important to note that fragrances can be found in perfumes and colognes, but also in deodorants, soaps and aftershave lotions.
3. Future avoidance of the fragrance is a must. Potent topical steroids, twice a day for two weeks, is recommended. Sedating oral antihistamines can be used at nighttime if sleeping is problematic. More widespread involvement or systemic features warrants systemic steroids.

Provided by: Dr. Benjamin Barankin

Case 6: Ruby's Red-Brown Nodule



Ruby, three-years-old, presents with an asymptomatic red-brown nodule over the left clavicle. The nodule was first noted one-year-ago.

Questions

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

Answers

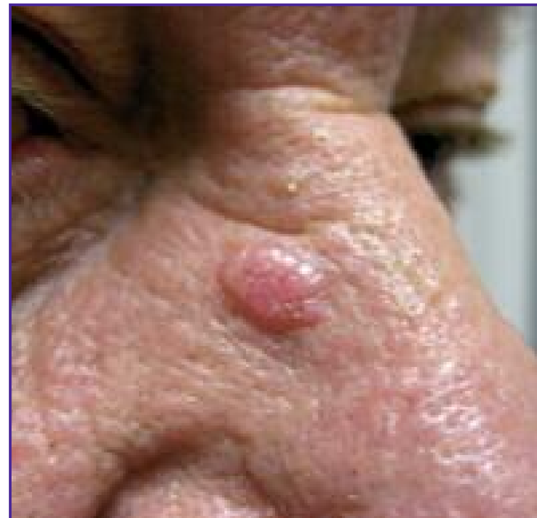
1. Juvenile xanthogranuloma.
2. Juvenile xanthogranuloma is the most common histiocytic disease in childhood. Affected children are otherwise healthy and their serum lipid levels are normal. Intraocular involvement is possible and is more common when there are multiple lesions or when a lesion is located proximal to an eye.
   Juvenile xanthogranuloma is occasionally associated with neurofibromatosis Type 1 and juvenile chronic myelogenous leukemia.
3. No treatment is necessary. Spontaneous and complete involution is common.

This condition is occasionally associated with neurofibromatosis Type 1 and juvenile chronic myelogenous leukemia.

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

Case 7: Pierson's Papule

Pierson, 62, presents with a slowly growing papule on his nose. He has a history of actinic keratoses on his scalp.



Questions

1. What is the diagnosis?
2. Which subtypes of this lesion are hardest to treat as far as cure rate?
3. What are the treatment options?

Answers

1. Basal cell carcinoma, the nodular type.
2. Morpheaform/sclerosing, infiltrating and micronodular, are subtypes of this lesion and are most difficult to treat.
3. Treatment depends on the:
   - age of the patient,
   - size of the lesion,
   - location and
   - subtype.

   Most commonly, electrodesiccation and curettage or excision can be tried to remove the papule. Mohs micrographic surgery on the face as a tissue-sparing procedure is ideal if available. Radiation or aggressive cryosurgery are less commonly employed. Topical therapy with imiquimod or 5-fluorouracil for superficial basal cell carcinoma is also an option.

Provided by: Dr. Benjamin Barankin

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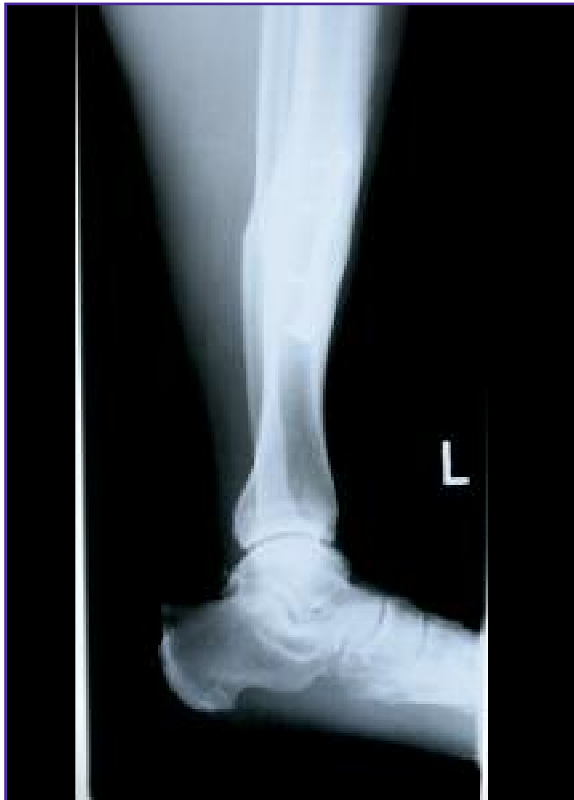
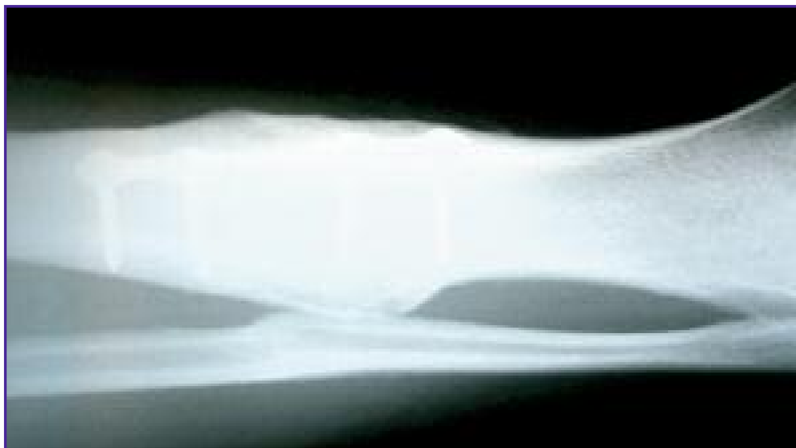
Case 8: Leroy's Leg



Leroy, 57, presents with a history of recurrent pain in his left leg following a fracture two years ago. X-rays of the left tibia and ankle are performed.

Questions

1. What do the x-rays show?
2. What is the management?



Answers

1. There is an old healed fracture of the distal tibial shaft, previously fixed with a side plate and multiple screws. There is also a fracture of the fibula visible at the same level, which is solidly united.
2. Management involves consultation with an orthopedic surgeon for assessment and treatment.
   Anti-inflamatory or analgesic medicines are recommended for the pain.

Anti-inflamatory or analgesic medicines are recommended for the pain.

Provided by: Dr. Jerzy Pawlak

Fasting plasma glucose can have its ups and downs

monday a.m.

tuesday a.m.

wednesday a.m.

People with diabetes have often found it difficult to keep their glucose readings consistent – even with excellent diabetes management habits. To make matters worse, many patients with inconsistent fasting plasma glucose levels can still have near-normal A1C results. This frustrating reality creates uncertainty for doctors and patients alike.[1]

REFERENCE: 1. Russell-Jones D. Insulin detemir: improving the predictability of glycaemic control. *International Journal of Obesity* 2004;28(Suppl 2):S29-S34.

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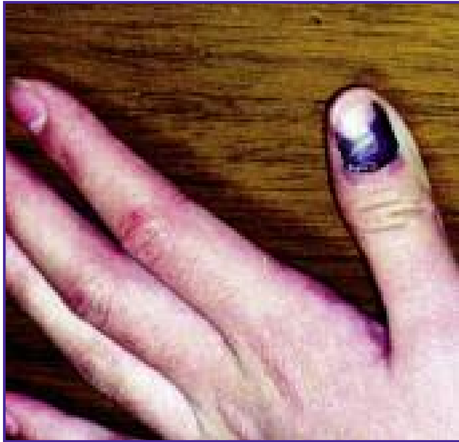
Case 9: Nancy's Nail



Nancy presents with a discoloured nail after her right thumb was accidentally hit with a can that fell from a shelf.

Questions

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

Answers

1. Subungual hematoma.
2. A subungual hematoma is a collection of blood beneath the nail plate that arises after trauma to the nail. The patient often experiences throbbing pain that worsens with increasing pressure as more blood accumulates.
3. If the subungual hematoma is small and does not cause much discomfort, no treatment is necessary. If it is painful, drainage is warranted. This procedure can be performed with a scalpel blade perpendicular to the nail in the centre of the hematoma and puncturing the nail by simultaneously applying downward and rotary pressure. A hot paper-clip or wire cautery is a useful alternative to trephination of the plate. The hole should be large enough to allow continuous drainage to minimize blood retention beneath the plate.

If this condition is painful, drainage is warranted.

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

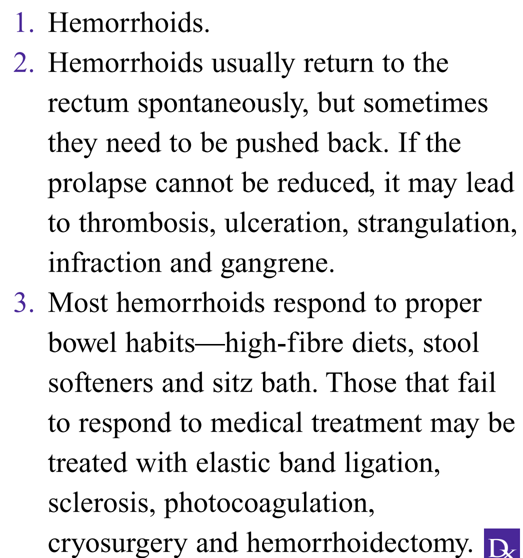
Case 10: Ben's Bloody Stool

Ben, 22, presents with bright red blood dripping into the toilet during defecation. He has had only one bowel movement in three days. The stools were hard.

Questions

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

Answers



1. Hemorrhoids.
2. Hemorrhoids usually return to the rectum spontaneously, but sometimes they need to be pushed back. If the prolapse cannot be reduced, it may lead to thrombosis, ulceration, strangulation, infraction and gangrene.
3. Most hemorrhoids respond to proper bowel habits—high-fibre diets, stool softeners and sitz bath. Those that fail to respond to medical treatment may be treated with elastic band ligation, sclerosis, photocoagulation, cryosurgery and hemorrhoidectomy. Dx

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