Photo Diagnosis

Illustrated quizzes on problems seen in everyday practice



Case 1

An 11-year-old boy presents with pain over the left clavicle after falling from an eight-foot high ladder and landing on a outstretched left hand.

Questions

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

Answers

- 1. Fractured left clavicle.
- 2. The majority of clavicular fractures heal spontaneously through callus formation. Immobilization of the affected arm for pain control can be easily and effectively accomplished by an arm sling. A figure-of-eight splint offers no advantage over the sling and can be uncomfortable for some children. Inappropriate use of the splint may occasionally even lead to edema of the ipsilateral upper limb, compression of axillary vessels and brachial plexopathy.

Provided by Dr. Alexander K.C. Leung; and Dr. Justine H.S. Fong, Calgary, Alberta.

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: (514) 695-8554



A 32-year-old former soccer player presents with recurrent attacks of excruciating pain in the right first metatarsophalangeal joint. The attacks have been occurring for the past six months.

Questions

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

Answers

- 1. Gouty arthritis.
- 2. Gouty arthritis may be triggered by trauma, heavy alcohol intake and excessive intake of red meat. The condition is often associated with obesity, impaired glucose tolerance, hypertriglyceridemia and hypertension.

 Untreated, it may lead to tophi, nephropathy and uric acid nephrolithiasis.
- Acute gout can be treated with colchicine, non-steroidal anti-inflammatory drugs or corticosteroids.

Provided by Dr. Alexander K.C. Leung; and Dr. Justine H.S. Fong, Calgary, Alberta.



A 28-year-old man is referred for evaluation of oval, hypopigmented macules on the upper chest.

Questions

- 1. What is the diagnosis?
- 2. What is the significance?
- 3. How is it treated?

Answers

- 1. Tinea versicolor.
- 2. Tinea versicolor is a superficial skin infection caused by the dimorphic lipid-dependent yeast, *Malassezia furfur. M. furfur* is a normal commensal on the skin surface. Tinea versicolor occurs when the yeast form of the organism converts to the hyphal form.
- 3. Most patients respond to topical treatment with selenium sulfide (2.5%) lotion; sodium thiosulfate (25%) lotion; or miconazole, clotrimazole, ketoconazole or terbinafine cream. Oral ketoconazole, fluconazole, itraconazole or terbinafine may be appropriate for patients with extensive disease, frequent recurrences or disease that is refractory to topical therapy.

Provided by Dr. Alexander K.C. Leung; and Dr. Justine H.S. Fong, Calgary, Alberta.

Photo Diagnosis



Case 4

A three-year-old girl presents with lethargy, constipation, dry skin, cold intolerance and a mass in the upper part of the neck.

Questions

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

Answers

- 1. Sublingual thyroid.
- 2. A sublingual thyroid results from a failure of descent of the thyroid anlage during the early stages of development. Hypothyroidism has been reported in up to 33% of patients with a sublingual thyroid. Occasionally, an enlarged sublingual thyroid may cause airway obstruction, dysphagia or dysphonia.
- 3. Hypothyroidism should be treated with synthetic thyroid hormone supplement.

Provided by Dr. Alexander K.C. Leung; and Dr. Andrew L. Wong, Calgary, Alberta.



Case 5

This six-month-old boy presents with brownishblack patches on the mid- to lower-back regions. The patches have been present since birth.

Questions

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

Answers

- Mongolian spots. Melanocytes originate and migrate from the neural crest. Mongolian spots are seen when these melanocytes have not yet reached the epidermis and are still localized in the skin's deeper layers.
- 2. Eventually, the melanocytes reach the epidermis and the spots disappear. This usually occurs between the ages of two and 10.

Provided by Dr. Rob Miller, Halfax, Nova Scotia.



This 15-year-old boy presents with a three-month history of a whitish-pink halo that developed around a pre-existing mole.

Questions

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

Answers

- 1. Halo nevus. This is felt to be an autoimmune condition in which humoral and cellular immunity may be responsible for pigment loss. This is a benign condition.
- 2. No therapy is necessary. This may affect only one nevus or a number of nevi. Advice with respect to sun protection is important, as these halo are devoid of pigment and may sunburn easily. Atypically appearing lesions in halo nevi, presence of an asymmetric halo or eccentric placement of melanocytic lesion in the halo should suggest the need for histopathologic exam for melanoma.

Provided by Dr. Rob Miller, Halifax, Nova Scotia.



Case 7

A 78-year-old woman presents for a total skin exam. Behind her left ear is a 5 mm, translucent, asymptomatic papule with telangiectasia.

Questions

- 1. What is the diagnosis?
- 2. What are the different subtypes of this growth?

Answers

- 1. Basal cell carcinoma.
- Subtypes include superficial, nodular, pigmented, cystic, micronodular, morpheaform and infiltrating; the last three types require more aggressive management, as they have higher recurrence rates.

Provided by Dr. Benjamin Barankin, Edmonton, Alberta.

This 18-year-old notices a pigmented patch on his upper arm which has been present since his early teenage years. He also notices there is increased hair in the patch.

Questions

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

Answers

- 1. Becker's pigmented hairy nevus. This pigmented nevus typically occurs in the teenage years, but may be present at birth. Usually, it is located on the upper arm or upper back. Not ony is there increased pigmentation in the skin, but there is also increased darkening of the hair in the affected area. It is benign in nature, with no malignant potential. It may enlarge a year or two after presentation.
- 2. No treatment is necessary. The hyperpigmentation may respond to therapy with a pigmented lesion laser, but the results are unpredictable and recurrences are common.

Provided by Dr. Rob Miller, Halifax, Nova Scotia.





This 25-year-old woman develops a widespread dermatitis after applying a cream containing Solarcain to reliveve her sunburn.

Questions

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

Answers

- Allergic contact dermatitis. Allergic type IV delayed hypersensitivity reactions to the benzocaine family can result in either localized or widespread dermatitic reactions.
- 2. Therapy consists of wet compresses, topical fluorinated steroids and oral antihistamines for nighttime pruritis. When dermatitis is extensive, systemic steroids for seven to 10 days are warranted.

Provided by Dr. Rob Miller, Halifax, Nova Scotia.



Case 10

A 38-year-old man presents with "conjunctivitis." He noticed some red in his eye weeks ago. He has a history of thrush and pneumocystis pneumonia that was treated with sulfonamide. The eye is not tender and his vision is normal.

Questions

- 1. What is the diagnosis?
- 2. Which infectious agent causes this?
- 3. What other disease could this be?
- 4. Is there treatment?

Answers

- 1. Kaposi's sarcoma (KS) in patient with AIDS.
- 2. Human herpesvirus-8.
- 3. This could also be a Bartonella infection (bacillary angiomatosis).
- 4. In this case, KS can be treated with local irradiation. If systemic therapy is needed, liposomal doxorubicin can be used.

Provided by Dr. Irving Salit, Toronto, Ontario





A 42-year-old woman presents with a two-month history of a paronychia, followed by red nodules the length of her hand and arm. She is treated with several courses of antibiotics without any benefit. She is well and specifically has no fever. She has not travelled recently. There is no trauma to the hand.

Questions

- 1. What important question should we ask about her household?
- 2. What is the diagnosis?
- 3. What infectious agents might cause this?
- 4. How is it treated?

Answers

- 1. She is asked if she has pet fish. The patient's answer is yes; she has an aquarium that she cleans regularly.
- 2. Nodular lymphangitis.
- 3. In this case, *Mycobacterium marinum* is the cause. Other possible causes are Sporothrix, Nocardia and other organisms.
- 4. The patient can be treated with a variety of antibiotics, such as clarithromycin or minocyline. In this case, rifampin is used with ethambutol; the results are excellent.

Provided by Dr. Irving Salit, Toronto, Ontario



A 50-year-old man reports growth of white-grey hair in an area of former hairloss.

Questions

- 1. What is the diagnosis?
- 2. Will he develop coloured hair in this location?

Answers

- 1. Regrowth of hair in patch of alopecia areata.
- 2. In alopecia areata, hair growth can often return in a white-grey colour. In most cases, it will eventually repigment.

Provided by Dr. Benjamin Barankin, Edmonton, Alberta.