



CASE 1



A 64-year-old woman presents with a slowly growing papule on her nasal tip that occasionally bleeds.

Questions

1. What is your diagnosis?
2. How serious is the diagnosis?
3. For what location should you consider referral for Mohs surgery?

Answers

1. Basal cell carcinoma (BCC).
2. A BCC is slow growing and rarely metastasizes. However, it can cause significant local destruction and disfigurement.
3. The Mohs technique provides the highest cure rate, while at the same time preserving tissue. Referral should be considered for BCCs located on: eyelids, nose, ear, nasolabial folds, upper lip, vermilion border, columella, periorbital, temples and pre- and post-auricular areas.

Provided by Dr. Benjamin Barankin, Edmonton, Alberta.

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CASE 2



A 14-year-old boy presents with an increasingly hypertrichotic plaque on his chest and arm. He has had brown pigmentation for several years, but the hair growth is new. It is asymptomatic, but cosmetically bothersome.

Questions

1. What is your diagnosis?
2. What are the common locations for this lesion?
3. How could you treat this condition?

Answers

1. Becker's nevus.
2. Shoulders, upper chest or back.
3. This is generally a benign entity so treatment is mainly cosmetic. Q-switched ruby laser has been used with some success to treat the hypertrichosis and hyperpigmentation.

Provided by Dr. Benjamin Barankin, Edmonton, Alberta.

CASE 3



A 15-year-old boy develops a smooth, round, bald patch on the scalp.

Questions

1. What is this likely to be?
2. What is the prognosis?

Answers

1. Alopecia areata.
2. In most patients, patches regrow completely within a few months. Some follow a relapsing pattern and, in some cases, all the hair is lost (alopecia totalis).

Provided by Dr. Jerzy Pawlak, Winnipeg, Manitoba.

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CASE 4



A 43-year-old man with a history of dry cough for the last two months presents with cough and some shortness of breath. A chest X-ray is performed.

Questions

1. What does the X-ray show?
2. What is the possible diagnosis?
 - a) Miliary tuberculosis with the left pleural effusion
 - b) Histoplasmosis with the left pleural effusion
 - c) Metastases from carcinoma, such as thyroid cancer and left pleural effusion
 - d) Primary lung cancer with metastases and left pleural effusion
 - e) All of the above

Answers

1. There are multiple interstitial nodules throughout both lungs. There is moderate-sized left pleural effusion.
2. e.

Provided by Dr. Jerzy Pawlak and T.J. Krocak, Winnipeg, Manitoba.

CASE 5



A 21-year-old man develops an itchy eruption under an adhesive plaster.

Questions

1. What is the problem?
2. How can you confirm the diagnosis?
3. What should be done?

Answers

1. Contact dermatitis.
2. Patch testing to a battery of chemicals.
3. Identify and remove the etiologic agent using only nonallergic and adhesive plaster in the future. Topical steroids may be used if necessary.

Provided by Dr. Jerzy Pawlak, Winnipeg, Manitoba.

CASE 6



A 74-year-old woman presents with whitish scarring localized to the extensor aspects of the forearms. She also has some degree of senile purpura.

Questions

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

Answers

1. Pseudocicatrix (pseudoscars) of Colomb.
2. This is a manifestation of chronic actinic damage to the dermis, resulting in damage to the connective tissue in the dermis. It is usually seen in conjunction with senile purpura, where chronic sun damage has resulted in elastosis of the elastic fibres around the blood vessels, resulting in easy bruisability. Minor trauma to the skin results in both the purpura and the development of the pseudoscars.

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

CASE 7



A 46-year-old woman develops a widespread rash after applying Kenacomb cream to her skin for an itchy area on her buttock. The rash has also spread to her trunk and face.

Questions

1. What is the diagnosis?
2. What is the causative agent?
3. What is the treatment?

Answers

1. Allergic contact dermatitis to Kenacomb cream.
2. Kenacomb contains the topical antibiotic, neomycin, as well as the stabilizer, ethylenediamine, both of which are topical sensitizers.
3. Treatment consists of topical and/or systemic steroids in addition to cool, wet compresses and oral antihistamines.

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

CASE 8



A 23-year-old man had a Mantoux test performed 48 hours ago. The skin test was a requirement before he was allowed to do volunteer work in a hospital. He was born in Hong Kong and had the bacille Calmette-Guérin (BCG) vaccination in his first year of life. He emigrated to Canada at five years of age. He was asymptomatic and healthy. There is no known exposure to tuberculosis. On exam, the erythematous area on the right forearm measures 22 mm and the induration 8 mm. His chest radiograph is normal.

Question

1. How would you interpret this Mantoux test result?

Answer

1. A Mantoux skin test consists of an intradermal injection of 5 tuberculin units of

purified protein derivative (0.1 mL) into the alveolar surface of the forearm using a 27-gauge needle. Precise injection would produce a raised, blanched wheal. The reaction is read by a trained person at 48 to 72 hours as diameter of induration. The diameter of erythema is not considered.

For the high-risk group (contacts of infectious tuberculosis cases, HIV-infected people, individuals with fibrotic or healed lesion of tuberculosis on radiographs), an induration of ≥ 5 mm is considered positive. For other high-risk groups (those born or who previously lived in a high-prevalence country, those who reside in long-term care or correctional facilities, children under four, injection drug users and those with certain medical risk factors), an indurated area ≥ 10 mm is considered positive.

For low-risk persons, the cutoff point for a positive reaction is 15 mm. False positive reactions to tuberculin may result from exposure to nontuberculosis mycobacteria or previous immunization with BCG. In either case, the induration is usually < 10 mm and the reaction wanes with time.

The Mantoux tuberculin skin test in this patient is considered negative.

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

CASE 9



A 10-year-old boy presents with erythema and scaling of the plantar surfaces of both feet. At times, cracking and painful fissuring are noticed on both feet.

Questions

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

Answers

1. Juvenile plantar dermatosis.
2. Juvenile plantar dermatosis is characterized by erythema, scaling, cracking and fissuring of the plantar surfaces of the feet. The condition is often bilateral and occurs mainly in prepubertal children. An atopic disposition is a risk factor. Occlusive synthetic footwear, xerosis and hyperhidrosis may exacerbate the condition.
3. Treatment consists of avoidance of impermeable socks and shoes and the use of emollients. Most children will outgrow the disorder at puberty.

Provided by Dr. Alexander K.C. Leung and Dr. C. Pion Kao, Calgary, Alberta.

CASE 10



A 22-year-old woman complains of fatigability. She has lost 10 lbs in the past six months. Her blood pressure is 90/50 mmHg. Hemoglobin is 120 g/L. Serum thyroxine and thyroid-stimulating hormone are normal. Monotest is negative.

Questions

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

Answers

1. Addison's disease (adrenocorticoid deficiency).
2. Increased pigmentation of the skin over the knuckles should always alert the clinician to the diagnosis of adrenocortical insufficiency. The diagnosis should be confirmed by the measurement of serum electrolytes (low sodium and high potassium) and serum cortisol levels before and after administration of adrenocorticotrophic hormone. Affected patients need chronic replacement therapy for their glucocorticoid and mineralcorticoid deficiency. The underlying causes should be treated, if possible.

Provided by Dr. Alexander K.C. Leung and Dr. Alexander G. Leong, Calgary, Alberta.

CASE 11



A two-year-old boy is noted to have a small area of alopecia. The lesion has been present since birth. There is no history of fetal distress, birth trauma or maternal varicella during the pregnancy.

Questions

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

Answers

1. Membranous aplasia cutis congenita.
2. Aplasia cutis congenita may present as an erosion, ulcer, scar or membrane. The latter,

referred to as membranous aplasia cutis congenita, is the most common form.

Membranous aplasia cutis congenita usually presents as a small, sharply defined, oval or circular lesion at or near the vertex of the scalp, although the lesion can occur elsewhere. Membranous aplasia cutis congenita is usually sporadic and has no associated anomaly. Occasionally, it may be inherited as an autosomal dominant or recessive trait. The lesion may also occur in association with an epidermal or organoid nevus, meningomyelocele, spinal dysraphism, gastroschisis or omphalocele.

Syndromes associated with membranous aplasia cutis congenita include Adams-Oliver syndrome, oculocerebrocutaneous syndrome, Johnson-Blizzard syndrome, Finlay-Marks syndrome, Patau syndrome and Wolf-Hirschhorn syndrome.

Membranous aplasia cutis congenita should be distinguished from iatrogenic injury caused by a scalp electrode or a congenital scar resulting from an intrauterine varicella infection.

Provided by Dr. Alexander K.C. Leung and Dr. C. Pion Kao, Calgary, Alberta.

CASE 12




During a routine physical exam, a 12-year-old boy is noted to have a curvature of the spine. Such a curvature was not noticed when he was examined two years ago. The child is asymptomatic. Past medical history is unremarkable.

Questions

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

Answers

1. Idiopathic scoliosis.

2. Scoliosis can be nonstructural or structural. Nonstructural scoliosis is a postural compensatory scoliosis that may result from posture habit or leg-length discrepancy and corrects with side bending. With structural scoliosis, there is no improvement of the scoliosis with position changes. Structural scoliosis can be classified as idiopathic, congenital (*e.g.*, hemivertebrae, fused spinal segments), neuromuscular (*e.g.*, cerebral palsy), post-surgical or post-traumatic. Idiopathic scoliosis accounts for approximately 75% of all cases of scoliosis. Most cases of idiopathic scoliosis occur in adolescence. The condition occurs more often in girls than boys. The condition is asymptomatic and is often discovered on routine physical exam. The curvature is most often convex to the right side.
3. A curve less than 20 degrees should be monitored for possible progression, but does not usually require treatment. Chiropractic treatment or exercise does not alter the outcome. Bracing is often recommended in the growing child if curves are between 20 and 40 degrees. Surgical treatment should be considered for patients with idiopathic curvature in excess of 40 degrees. 

Provided by Dr. Alexander K.C. Leung and Dr. C. Pion Kao, Calgary, Alberta.