Illustrated quizzes on problems seen in everyday practice

CASE 1



A 21-year-old woman is concerned about dark, longitudinal bands which appeared on her thumbs six months ago.

Questions

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

Answers

- 1. Melanonychia striata.
- 2. Melanonychia striata is not uncommon in dark-skinned individuals. The condition results from increased activity of melanocytes in the nail matrix. Melanonychia striata may occur spontaneously or as a result of trauma, irradiation, gold therapy or treatment with cytotoxic agents. It may also be a sign of arsenic intoxication, hemochromatosis, Addison's disease or vitamin B₁₂ deficiency.

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

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A four-day-old infant presents with lethargy, vomitting, abdominal distension and bloody stool.

Questions

- 1. What is the diagnosis?
- 2. What is the significance?
- 3. What can be done?

Answers

- 1. Necrotizing enterocolitis.
- Necrotizing enterocolitis may be complicated by bowel perforation, peritonitis, septicemia, shock and death.
- Treatment consists of cessation of feeding, nasogastric decompression, parenteral nutrition and systemic antibiotics. Surgical resection of the necrotic bowel may be necessary if there is evidence of bowel perforation.

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

CASE 3



A 25-year-old man is noted to have painless fissures on the dorsal surface of his tongue.

Questions

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

Answers

- 1. Scrotal (fissured) tongue.
- The fissures may collect food particles and debris, resulting in irritation, inflammation and halitosis.

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



The mother of this six-month-old boy is concerned by the deformities on both her son's feet.

Questions

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

Answers

- 1. Bilateral duplication of the great toes.
- 2. The condition is often inherited as an autosomal dominant trait with variable expressivity. It may also occur spontaneously, as well as in certain genetic syndromes, such as Apert syndrome, Carpenter's syndrome, Pfeiffer syndrome, Rubinstein-Taybi syndrome and Weaver syndrome.

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

Case 5



Case 5

A 25-year-old woman is concerned that the fourth and fifth toes in both her feet do not look "normal." The deformities were first noted in infancy.

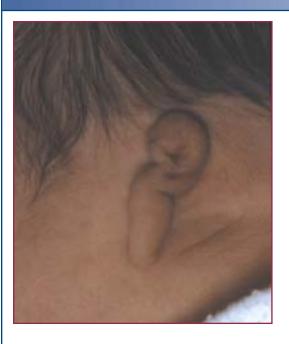
Questions

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

Answers

- 1. Bilateral clinodactyly of the toes.
- 2. Clinodactyly can be congenital or acquired. The latter may be secondary to physical or thermal injury to the epiphyses. Congenital clinodactyly is usually sporadic. In the majority of cases, it is an isolated anomaly and is of no medical significance. Occasionally, it may be a component manifestation in various genetic syndromes (*e.g.*, Seckel syndrome, Mohr syndrome).

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



This newborn infant is noted to have malformation of the left ear.

Questions

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

Answers

- 1. Microtia.
- 2. Microtia is often associated with stenosis of the atresia of the ear canal and malformation of the middle ear. Affected infants should have an audiometric evaluation soon after birth. A computed tomography scan of the middle ear structure will help in the surgical planning.

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

Case 7



A 42-year-old man presents with a gradual onset of erosions and blistering on the dorsal hands.

Questions

- 1. What is the diagnosis?
- 2. What tests should be performed?
- 3. What is the treatment of choice?

Answers

- 1. Porphyria cutanea tarda.
- 2. 24-hour urine and fecal porphyrins, hepatitis C, complete blood count and serum ferritin.
- 3. Repeated phlebotomy.

Provided by Dr. Scott R.A. Walsh, Toronto, Ontario.



This newborn is noted to have a mass hanging down from the left fifth finger.

Questions

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

Answers

- 1. Rudimentary polydactyly.
- 2. Polydactyly can be classified as preaxial (thumb or great toe), central (second, third or fourth digit) or postaxial (fifth digit). It can be further divided into two types: type A, a well-formed articulated digit; and type B, a rudimentary digit. The latter is a rare, congenital anomaly and may represent an amputation stump of a peduncled finger.
- 3. Surgical excision of the rudimentary digit.

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



A woman in her early 30s presents on the first cold day of winter. She has symmetrical distribution of blanching. She has previous history of similar symptoms in cold weather, but no other symptoms or significant medical conditions.

Questions

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

Answers

- 1. Raynaud's disease.
- 2. Management consists primarily of avoiding exposure of hands to cold. Prazosin, 1 mg to 2 mg in the morning and at bedtime, or nifedipine, 10 mg to 30 mg orally three times daily, can also be used. Pentoxifylline, 400 mg three times daily, may also be helpful.

Provided by Dr. Anthony Rockel, Placentia, Newfoundland.

CASE 10



This patient presents with large swelling on his forehead which has been present for several years.

Questions

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

Answers

- 1. Epidermal inclusion cyst.
- 2. Excision is the treatment of choice.

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



A 32-year-old man presents with a three-month history of painful oral lesions and a three-week history of a worsening blistering and sloughing rash over his face, trunk, arms and legs. Both Nikolsky's and Asboe-Hansen's signs are positive.

Questions

- 1. What is the diagnosis?
- 2. What is the differential diagnosis?
- 3. What are the Nikolsky's and Asboe-Hansen's signs?
- 4. What treatment is available?

Answers

- 1. Pemphigus vulgaris.
- 2. The differential diagnosis would include toxic epidermal necrolysis and staphylococcal scalded skin syndrome.
- 3. Nikolsky's sign is shearing of perilesional skin with mechanical pressure, whereas Asboe-Hansen's sign is lateral extension of a blister through perilesional skin with mechanical pressure. Both signs indicate a widespread epidermal process causing separation of keratinocytes above the basement membrane zone. Both of these signs are positive in pemphigus, toxic epidermal necrolysis and staphylococcal scalded skin syndrome.
- 4. Treatment of widespread pemphigus vulgaris includes prednisone at a minimum of 1 mg/kg/day and early addition of adjunctive steroid-sparing immunosuppressive therapies (*e.g.*, mycofenolate mofetil, azathioprine, cyclophosphamide, intravenous immunoglobulins).

Provided by Dr. Scott R.A. Walsh, Toronto, Ontario.



A 30-year-old man develops recurrent crops of mildly pruritic, erythematous papules on his legs, trunk and arms that resolve with varioliform scarring.

Questions

- 1. What is the diagnosis?
- 2. What are the treatment options for this rash?
- 3. What other diseases can cause varioliform scarring?

Answers

- 1. Pityriasis lichenoides et varioliformis acuta (Mucha-Haberman disease).
- 2. Treatment options include topical corticosteroids, topical tar, oral tetracycline, erythromycin or phototherapy.
- 3. Varioliform scarring can be seen in varicella (chickenpox), smallpox (variola), lymphomatoid papulosis and hydroa vacciniforme.

Provided by Dr. Scott R.A. Walsh, Toronto Ontario.



A 25-year-old man presents with a large number of hard papules in the perinasal area of the face.

Questions

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

Answers

- 1. Multiple trichoepitheliomas.
- 2. Trichoepitheliomas are benign tumours of hair-follicle origin. These lesions are treated with a combination of shave excision and carbon dioxide laser therapy. Multiple surgical excisions are impractical because of the multiplicity of lesions. Shaving these lesions plush with the surrounding skin allows for healing with secondary intention and a good cosmetic result.

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

CASE 14



A 25-year-old man questions the nature of a pigmented lesion inferior to his right nipple.

Questions

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

Answers

- 1. Supernumerary nipple. These pigmented lesions resemble nevi, but their occurrence in the nipple line hints at their true nature.
- 2. Reassurance is all that is necessary.



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