Illustrated quizzes on problems seen in everyday practice



### Case 1

A 61-year-old man presents with a mildly pruritic eruption consisting of small annular to elliptical salmon-coloured plaques, with a marginal collarette of non-confluent whitish scale. The lesions are most numerous over the trunk and appear to fall in the lines of cleavage resembling a Christmas tree pattern. The eruption began with a single large plaque over his left shoulder and, one week later, progressed to approximately 30 smaller lesions on the body.

### **Questions**

- 1. What is the diagnosis?
- 2. What infectious agents have been associated with this disease?
- 3. What occupation has a four-fold increased risk of this rash over the general population?

#### **Answers**

- 1. Pityriasis rosea.
- 2. Possible infection or reactivation of human herpes virus (HHV) 6 and 7 have been associated with pityriasis rosea.
- 3. Dermatologists.

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

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A 56-year-old man presented with a two-month history of asymptomatic, hyperpigmented, slightly scaley plaques over his chest and upper abdomen.

### Questions

- 1. What is the diagnosis?
- 2. What is the infectious agent?
- 3. How is the diagnosis confirmed?

### **Answers**

- 1. Pityriasis versicolor (PV).
- 2. PV is an infection of the stratum corneum by the lipophilic dimorphic fungus *Malassezia furfur* (also called *Pityrosporum ovale* and *P. orbiculare*).
- 3. The diagnosis is confirmed by light microscopy of fungal scrapings in potassium hydroxide (KOH). The fungus is difficult to culture due to its high lipid requirements and, thus, classic appearance of spaghetti and meatballs (hyphae and spores) in a KOH preparation is used for diagnosis.

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



# Case 3

A 67-year-old man presented with rheumatoid nodules on his forearm.

#### Question

- 1. What is their prognostic significance?
- 2. What is the differential diagnosis?

#### **Answer**

- 1. Rheumatoid nodules present most commonly in men with a high titer rheumatoid factor who have active articular disease.
- 2. Differential diagnosis includes tophi (gout), xanthomatosis, multicentric reticulohistocytosis, and basal cell carcinoma.

Provided by Dr. Jerzy Pawlak, Winnipeg, Manitoba.



A 24-year-old man presented with a number of lumps on his scrotum. They are painless and have developed slowly over the past 10 months.

#### Questions

- 1. What is the most likely diagnosis?
- 2. What is the prognosis and treatment?

#### **Answers**

- 1. Epidermal cysts.
- 2. These cysts can appear anywhere on the body and are quite benign. They can be left alone or can simply be incised and the contents and lining of the cysts extracted.

Provided by Dr. Jerzy Pawlak, Winnipeg, Manitoba.



# Case 5

This five-day-old infant had a serum bilirubin level of 340 µmol/L on the second day of life. Phototherapy was started and the serum bilirubin fell to 270 µmol/L on day five.

#### Questions

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

#### **Answers**

- 1. Bronze baby syndrome.
- 2. This acquired pigmentation occurs in neonates. It is presumably caused by a photo-oxidation product of bilirubin or a porphyrin compound following photo desiccation.

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



A 44-year-old woman presented with a six-month history of extremely itchy, dull, erythematous, purple plaques on bilateral shins. There are no oral, scalp, or nail changes, nor any family history of skin problems. She is otherwise healthy.

### Questions

- 1. What is the diagnosis?
- 2. What are the features of this condition?
- 3. How would you treat this patient?

#### **Answers**

- 1. Hypertrophic lichen planus.
- 2. The five Ps: pruritic, purple, papule, planar, and polygonal.
- 3. If symptomatic, treat with potent topical steroids and/or intralesional triamcinolone. Systemic steroids or ultraviolet therapy can also be used by those with experience treating this condition.

Provided by Dr. Benjamin Barankin, Edmonton, Alberta.



Figure 1. X-ray of the left wrist.



Figure 2. Deformity after fracture.

A 72-year-old woman fell down and landed on her left arm; her wrist was extended. An X-ray of the left wrist was done (Figure 1).

### Questions

- 1. What does the X-ray show?
- 2. What is the management strategy?
- 3. What kind of derformity can we observe after such a fracture (Figure 2)?

#### **Answers**

- 1. Colles fracture. The fracture line is transverse and about 2 cm proximal to the distal articular surface of the radius. In addition, the styloid process of the ulna may be fractured. There may be no displacement in this case, but displacement is common.
- 2. Management involves reduction of the Colles fracture by applying traction and casting.
- 3. Silver fork deformity.

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



This newborn was noted to have a cystic mass 3 cm in diameter over her right scapula. The mass glowed with transillumination.

# Questions

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

#### **Answers**

- 1. Lymphangioma.
- 2. A lymphangioma is a benign tumour of the lymphatic system that can occur in nearly all parts of the body. More than two-thirds of lymphangiomas are apparent at birth. In contrast to hemangiomas, lymphangiomas usually persist or undergo only partial regression. Complications include cellulitis, lymphangitis, and fibrotic changes.

Provided by Dr. Alexander K.C. Leung and Dr. Hardally R. Hedge, Calgary, Alberta.



A two-week-old infant was noted to have thickening of the mucosa in the centre of the upper lip.

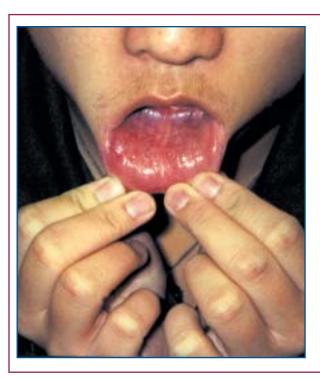
### **Questions**

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

#### **Answers**

- 1. Sucking callus.
- 2. A sucking callus usually occurs in the central portion of the upper lip. It often persists for a few weeks to months and is of no medical significance.

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



# Case 10

A 12-year-old boy was noted to have minute cysts in the upper aspect of his lower lip for the past six months.

#### **Questions**

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

#### Answers

- 1. Salivary retention cysts.
- 2. These salivary retention cysts result from extravasation or retention of salivary gland contents.

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



A two-year-old boy was noted to have a soft tissue mass in the right preauricular area. The mass did not contain any cartillage.

### Questions

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

### **Answers**

- 1. Preauricular tag.
- 2. In the majority of cases, preauricular tags have no clinical significance. However, they are found with increased frequency in cat-eye syndrome, Kabuki syndrome, Melnick-Fraser syndrome, and oculoauricular vertebral dysplasia.

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



# Case 12

A 43-year-old woman presented with an asymptomatic rash unilaterally on her right anterior and lateral thigh. Further questioning revealed she works in a very old office building with poor heating, so she uses a space heater at her desk (which she keeps on her right side).

### Questions

- 1. What is the diagnosis?
- 2. What is the cause
- 3. How would you manage this patient?

#### **Answers**

- 1. Erythema ab igne.
- 2. Prolonged use of a heat source (*e.g.*, fireplace, hot water bottle, space heater).
- 3. Discontinue use of space heater. Consider laser treatment if the rash hasn't sufficiently improved after one year.

Provided by Dr. Benjamin Barankin, Edmonton, Alberta.



This two-month-old boy was noted to have papules on his cheeks and chin.

### Questions

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

#### **Answers**

- 1. Infantile acne.
- 2. Infantile acne likely results from the effect of androgens on sebaceous glands. Shortly after birth, a transient surge of gonadotropin occurs, leading to a sharp increase in serum testosterone levels. Testosterone levels peak at about one to three months. Thereafter, the gonadotropin levels fall and, by six month, serum levels of testosterone decrease to low levels that persist until the onset of puberty.

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