



*Illustrated quizzes on  
problems seen in everyday practice*



## Case 1

A 58-year-old woman presents with an unsightly thickening of her lower lip, which she has had for over a year. It is asymptomatic and she says she doesn't apply anything to the lips. She is otherwise healthy. On exam, there is a firmness and slight nodularity to the lower lip.

## Questions

1. What is your diagnosis?
2. How would you treat this patient?

## Answers

1. Granulomatous cheilitis.
2. Treat with intralesional triamcinolone acetonide, 2.5 mg/mL to 10 mg/mL.

Provided by Dr. Benjamin Barankin and Dr. Norman Wasel, Edmonton, Alberta.

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### Case 2

A 35-year-old woman presents with fever, eye pain, bilateral ankle arthralgias, and a reddish-brown infiltrated plaque over previous scars on her knees.

#### Questions

1. What is the diagnosis?
2. What other systemic associations are common in the acute stage of this disease?

#### Answers

1. Sarcoid developing in a scar.
2. Sarcoid can affect any organ system, but the most common associations seen with acute sarcoid include erythema nodosum, fever, uveitis, arthritis, and hilar or other lymphadenopathy.

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



### Case 3

A three-year-old girl presents with recurrent gum bleeding and halitosis. She is not taking any medication. The gum is red and swollen. The tongue and buccal mucosa are normal.

#### Questions

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

#### Answers

1. Gingivitis.
2. The majority of cases result from poor oral hygiene with accumulation of dental plaque at the gingival margin. Gingivitis may also be associated with chronic mouth breathing. At times, it may be the presenting feature of leukemia, neutropenia, and scurvy.

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



## Case 4

A 58-year-old man with a past history of peripheral vascular disease requiring aortofemoral bypass grafting, presents with a one-week history of rapidly enlarging, painful ulceration on the dorsum of his non-dominant hand.

## Questions

1. What is the diagnosis?
2. What are five systemic associations with this disease?
3. What should be done?

## Answers

1. Pyoderma gangrenosum.
2. Although approximately 50% of cases are idiopathic, systemic associations with pyoderma gangrenosum include inflammatory bowel disease, rheumatoid arthritis, Behçet's disease, plasma cell dyscrasias, and myeloid leukemias.
3. Possible systemic associations need to be excluded. Treatment of localized lesions of pyoderma gangrenosum often involves intralesional corticosteroids. This patient responded well to the combination of repeated intralesional triamcinolone and topical sodium cromoglycate.

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



### Case 5

A 53-year-old man has a pigmented lesion on the left forearm that was first noted at birth. Coarse, long, darkly pigmented hair appeared on the lesion at the age of one.

### Questions

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

### Answers

1. Hairy congenital nevomelanocytic nevus.
2. The lesion is cosmetically unsightly and is associated with a 3% to 8% lifetime risk of progression to melanoma.
3. Management of congenital nevomelanocytic nevus remains controversial. Although there is risk of progression to melanoma, melanoma transformation of lesions in the extremities is very unusual. Some authors recommend prophylactic excision of the lesion in toto, with the excision carried to the deep fascia. Other authors recommend a conservative approach with followup every six months for five years and every twelve months thereafter.

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

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### Case 6

A 50-year-old woman has had multiple joint pain in the fingers and toes sporadically for the past 10 years. She also experiences morning stiffness of the fingers.

### Questions

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

### Answers

1. Rheumatoid arthritis.
2. Rheumatoid arthritis may result in joint deformities as a result of chronic synovial inflammation, cartilage destruction, and bone erosion. Osteopenia/osteoporosis may result from immobilization and corticosteroid therapy. Felty syndrome is characterized by chronic rheumatoid arthritis, splenomegaly, and neutropenia.
3. Non-pharmacologic therapy consists of appropriate exercise with adequate rest, joint protection with splints and proper footwear, as well as physical and occupational therapy. Non-steroidal anti-inflammatory drugs are used as first-line therapy. If the patient fails to respond to the basic regimen, drugs such as methotrexate, lefunamide, and hydroxychloroquine should be considered.

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



## Case 7

A five-year-old boy is noted to have pigmented areas in the medial inferior quadrant of the right eye.

### Questions

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

### Answers

1. Scleral melanocytosis.
2. Scleral melanocytosis, a congenital melanocytic hyperpigmentation of the sclera, is a common characteristic of Oriental and black individuals. It may occur by itself or in association with oculodermal melanocytosis (nevus of Ota).

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

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### Case 8

A 73-year-old man presents with a round, crusted ulceration behind his left ear. The ulceration has been increasing in size very slowly over the past two years and now, the lesion has ulcerated completely and bleeds very often.

#### Question

1. What first-line investigation should be performed?
  - a) Biopsy of the lesion
  - b) Complete blood count
  - c) Computed tomography scan of the head
  - d) Head X-ray

#### Answers

1. a. Biopsy is essential for all suspected skin tumours or lesions.

Provided by Dr. Jerzy Pawlak, Winnipeg, Manitoba.



### Case 9

An eight-year-old presents with a superficial, tender tongue lesion.

#### Question

1. This superficial tender tongue ulcer is probably which of the following?
  - a) Fungal lesion
  - b) Traumatic
  - c) Luetic
  - d) Aphthous

#### Answers

1. d. The most common mouth ulcers are aphthous. They are pointy, with a yellowish base, and surrounded by a red halo.

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



## Case 10

A 22-year-old man presents with a swollen and bruised left index finger. He injured it while playing hockey. An X-ray is performed.

### Questions

1. What does the X-ray show?
2. What is the management strategy?

### Answers

1. There is a crack fracture through the mid-shaft of the proximal phalanx. The distal fragment remains in excellent position and alignment.
2. Immobilization is the proper treatment. This is done by binding the phalanges of the injured finger to the corresponding segments of an adjacent, normal finger with adhesive strapping.

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





### Case 11

A mother brings her 14-month-old boy to hospital because he develops a rash. The boy is constantly scratching the rash and it makes him irritable. He has dry skin, with eczematous and erythematous papules.

#### Questions

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

#### Answers

1. Scabies is a dermatosis caused by infestation with the mite, *Sarcoptes scabiei var hominis*. It is spread by close physical contact between infected people.
2. Differentiation from eczema and impetigo may be difficult, particularly as hypersensitivity to the scabies mite may cause an eczematous eruption associated with erythematous papules. The rash of hand, foot, and mouth disease may also have a similar appearance.
3. Treatment is with permethrin 5% cream (for children older than six months). The cream should be applied topically to the whole body, including face and hair (avoid eyes and mucous membranes); it should be left on overnight. The itching of scabies does not resolve immediately after treatment and may take two to three weeks to subside. For moderate and severe infections, repeat scabicide treatment in 14 days. Treat family and close contacts, even if they are symptom-free. Inform child's mother to wash clothing and bedcloths.

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

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### Case 12

A 51-year-old woman presents with muscle weakness, dysphagia, and bilateral ptosis.

#### Questions

1. What is the diagnosis?
2. What tests confirm diagnosis?
3. What are the treatment options?

#### Answers

1. Myasthenia gravis (MG).
2. Anticholinesterase (*i.e.*, edrophonium) test should be done to look for improvement in muscle strength. Electrodiagnostic (decremental response on repetitive nerve stimulation, increased jitter on single-fibre recording) anti-acetylcholine receptor (anti-AChR) antibody levels do not correspond to the severity of disease. Computed tomography and magnetic resonance imaging can be done to look for thymoma. Thyroid function, rheumatoid factor, and antinuclear antibody tests may also be helpful in the diagnosis.
3. Anticholinesterase medication (*i.e.*, pyridostigmine) can be used. Thymectomy can be done for all MG patients (from puberty to 55 years). Immunosuppression (alternate-day prednisone, azathioprine, cyclosporine) or plasmaphoresis can also be used.

**Dx**

Provided by Dr. Jerzy Pawlak, Winnipeg, Manitoba.