# Illustrated quizzes on problems seen in everyday practice

#### **Cases this month**

- **Bothersome Bump**
- 2. Dark Patches
- 3. Edmund's Eye
- Rusty's Nails
- 5. Icy Toes
- 6. **Brow Blemish**
- Helmet Head

- Cheeky Spot
- 9. **Burning Blush**
- 10. Charlie's Chin
- 11. Serious Sequelae
- 12. Falling Follicles
- 13. Injured Arm

- 14. Robin's Red Spots
- 15. Rose's Rash
- 16. Sore Smile
- 17. Brown Blotches
- 18. Baby's Oral Cyst
- 19. Bulging Belly

## **CASE 1: BOTHERSOME BUMP**



A 25-year-old male has developed this lesion at the base of his nail. He has a number of similar lesions on his other fingers. These have been present since his teenage years.

## **Questions**

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

### **Answers**

- 1. Periungal fibroma.
- Periungal fibroma.
   These lesions are seen in association with triad of seizures, mental retardation an congenital white spots.

  3. If these are symptomatic, they can be excised. tuberous sclerosis. This is an autosomal dominant condition, characterized by the triad of seizures, mental retardation and

## **CASE 2: DARK PATCHES**



A 45-year-old male presents with a long-standing history of numerous nevi scattered on his body. He is concerned about a lesion on his chest in light of a family history of melanoma.

### **Questions**

- 1. What is your diagnosis?
- 2. What are the signs to look for in making this diagnosis or that of a melanoma?
- 3. How would you manage this lesion?

#### **Answers**

- 1. Clinically, this appears to be a dysplastic or atypical nevus.
- 2. The ABCD(E) rule, traditionally followed by most physicians, is:
- Asymmetry
- Border irregularity
- Color variegation (*i.e.*, more than one color)
- Diameter greater than six millimetres
- Evolution (any change in size, color, etc.)
- 3. This lesion warrants a deep shave, punch or excisional biopsy, as several of the aforementioned features are present.

## CASE 3: EDMUND'S EYE



A 73-year-old male presents with a slowly growing asymptomatic papule on his upper eyelid. He is otherwise healthy, although he has had two basal cell carcinomas removed in the past.

## **Questions**

- 1. What is your diagnosis?
- 2. Where is the typical location of this lesion?
- 3. How would you manage this patient?

#### **Answers**

- 1. Sebaceous carcinoma.
- 2. The upper eyelid margin.
- 3. A biopsy is warranted to confirm the diagnosis and is best left to an ophthalmologist or oculoplastic surgeon. In the meantime, a thorough lymph node examination is warranted, as well as appropriate imaging based on a thorough history and physical examination. Orbital invasion and metastases are not uncommon.



## CASE 4: RUSTY'S NAILS



A 70-year-old male with longstanding erythematous and scaly plaques on his body presents with unsightly, yellow fingernails.

### **Questions**

- 1. What is your diagnosis?
- 2. How would you describe these nails?
- 3. How can you manage his problems with his skin and nails?

#### **Answers**

- 1. Psoriatic nails in longstanding psoriasis.
- 2. Total nail dystrophy.
- 3. Nail psoriasis can be modestly improved with potent topical and intralesional steroids and topical calcipotriol.

  Methotrexate is typically used for significant psoriatic nail disease. There can be some improvement with acitretin, phototherapy, cyclosporine and the new biologic agents.

Provided by Dr. Benjamin Barankin, Toronto, Ontario.

## Case 5: Icy Toes



A 44-year-old female presents to your clinic in January with tender, purple toes.

### **Questions**

- 1. What is your diagnosis?
- 2. What causes this condition?
- 3. How would you manage this condition?

#### **Answers**

- 1. Chilblains or pernio.
- 2. The condition is due to an aberrant vascular response in damp cold conditions.
- 3. Keep feet warm and dry and minimize exposure to cold weather. Medications that have been tried, with mixed results, are calcium channel blockers and pentoxifylline.

## CASE 6: BROW BLEMISH



A 62-year-old farmer presents with a translucent papule on his forehead. The papule bleeds periodically.

### **Questions**

- 1. What is your diagnosis?
- 2. Is this a common problem?
- 3. How would you treat this condition?

### **Answers**

- 1. Basal cell carcinoma (BCC).
- 2. BCC is the most common cancer and by far the most common skin cancer. Approximately 30% of Caucasians in North America will develop a BCC in their lifetime.
- 3. Electrodesiccation and curettage, excision and Mohs's micrographic surgery are preferred. Radiotherapy and aggressive cryotherapy are other options in select individuals.

Provided by Dr. Benjamin Barankin, Toronto, Ontario.

## CASE 7: HELMET HEAD

A 16-year-old high school football star presents with a three-year history of papules and pustules, predominantly on his forehead.

### **Questions**

- 1. What is your diagnosis?
- 2. Why is his acne localized to his forehead?
- 3. How would you manage this patient?

#### **Answers**

- 1. Acne vulgaris.
- 2. Athletic activity can result in the development of acne under straps or helmets secondary to occlusion.
- 3. Washing his face after practice with a mild cleanser and wiping his forehead with antibiotic-impregnated pads during downtime would be beneficial. Otherwise, standard topical therapy with benzoyl peroxide and/or a course of an oral tetracycline or derivative may be warranted.



## CASE 8: CHEEKY SPOT



A 14-year-old boy presents with a dark nevus on his cheek. His mother is concerned about melanoma since it has grown in size over the past few years.

### **Questions**

- 1. What is your diagnosis?
- 2. Are these lesions more common in certain individuals?
- 3. How do you manage this lesion?

#### **Answers**

- 1. Blue nevus.
- 2. Blue nevi are most common in the Asian population, followed by Caucasians and rarely in dark-skinned individuals.
- 3. Reassure the patient that the lesion is clinically benign. Discussing the ABCDs (Case 2) is always valuable, as is stressing the importance of sun protection.

Provided by Dr. Benjamin Barankin, Toronto, Ontario.

## CASE 9: BURNING BLUSH



A 53 year-old female presents with concerns regarding easy flushing, sensitive facial skin and increased blood vessels on the cheeks.

## **Questions**

- 1. What is your diagnosis?
- 2. What are the variants of this condition?
- 3. How would you manage this patient?

#### **Answers**

- 1. Rosacea (erythematotelangiectatic type).
- 2. Erythematotelangiectatic, papulopustular, ocular and phymatous (*i.e.*, rhinophyma) types.
- 3. Discuss the importance of sun protection and trigger avoidance (*i.e.*, spicy foods, red wine, hot beverages, *etc.*). Treatment consists of laser or intense pulsed-light.

## Case 10: Charlie's Chin



A 21-year-old black male presents with a twoyear history of an expanding firm mass on his chin. It is asymptomatic and he is otherwise healthy.

### **Questions**

- 1. What is your diagnosis?
- 2. Are there any medical concerns?
- 3. How would you manage this condition?

### **Answers**

- 1. Epidermoid cyst.
- Although cysts can occasionally become inflamed and painful, this is a predominantly cosmetic concern. In the rare event of an associated malignancy, rapid growth and friability are features.
- 3. Intralesional triamcinolone can be tried.
  Infected cysts require incision, drainage and oral antibiotics. Surgical options include incision and drainage, although excision in toto is more definitive.

## Case 11: Serious Sequelae



A 74-year-old female, who recently switched to a new anticonvulsant, presents with edematous erythematous plaques and bullae, as well as orogenital mucosal erosions. Approximately 15% to 20% of her body appears to be affected.

### **Questions**

- 1. What is your diagnosis?
- 2. How is this diagnosis made?
- 3. How would you manage this condition?

#### **Answers**

- 1. Stevens-Johnson Syndrome (SJS) and toxic epidermal necrolysis (TEN) overlap.
- 2. SJS and TEN are considered to be on a spectrum with SJS affecting < 10% of the body with two or more mucosal surfaces involved, while TEN is more widespread, with tender sloughing of sheets of skin affecting more than 30% of the body. Coverage of between 10% to 30% of the body's skin surface is considered an overlap of the two conditions.
- 3. This patient requires immediate admission to a burn unit for:
  - fluids and electrolyte resuscitation,
  - · thermal regulation,
  - · proper wound care,
  - · analgesia and
  - frequent assessment of infection (sepsis is number one cause of death). Therapy such as intravenous immunoglobulins or prednisone are controversial and hospital- or physician-dependent.

Provided by Dr. Benjamin Barankin, Toronto, Ontario.

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## **CASE 12:**

## **FALLING FOLLICLES**



A 44-year-old female presents with a seven year history of hair loss around the periphery of her scalp. She has tried various cortisone lotions without benefit.

## **Questions**

- 1. What is your diagnosis?
- 2. What is the significance of this pattern?
- 3. What therapies could you try?

#### **Answers**

- 1. Oophiasis pattern of alopecia areata.
- 2. Patients with extensive alopecia areata, such as alopecia totalis and alopecia universalis, as well as those with the oophiasis pattern respond poorly to treatment.
- 3. Intralesional steroids in experienced hands should be tried. Topical immunotherapy with diphencyprone is another option as is topical minoxidil.

## Case 13: Injured Arm



A 23-year-old man presents with pain and swelling in his right arm immediately after he was in a motor vehicle accident. Radiographs of the left forearm, shoulder and elbow joint were taken.

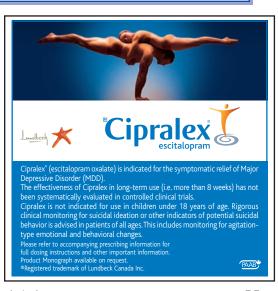
### **Questions**

- 1. What does this radiograph show?
- 2. What are the potential complications?
- 3. What is the treatment?

### **Answers**

- 1. Fracture of the shaft of the right humerus.
- 2. The potential complications include:
  - · radial nerve palsy,
  - brachial artery injury,
  - · nonunion and
  - malunion.
- 3. Most closed fractures of the humeral shaft can be managed by immobilization of the fractured area using

non-operative methods. Immobilization of the fractured area can be achieved by the use of a cast, a splint or a brace. A brace is not recommended if the patient is uncooperative, if the alignment is not acceptable or if there is a coexisting soft tissue injury.





A 40-year-old female requests evaluation of several cherry-red papules, three of which are on her right breast.

### **Questions**

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

### **Answers**

- 1. Cherry angiomas (Campbell de Morgan spots).
- 2. Cherry angiomas are the most commonly acquired cutaneous vascular proliferation and are particularly common in middle-aged or elderly persons. Both sexes are affected. Clinically, cherry angiomas present as round or oval, light red papules, most commonly on the trunk and proximal extremities. The lesions increase in size and number with time. Histologically, they are angiokeratomas. The term "cherry angioma" is derived from the color of the lesion.
- This is a benign condition and no treatment is necessary. Laser surgery, shave excision, or electrodesiccation may be used if a patient wants them removed for cosmetic reasons.

## CASE 15: ROSE'S RASH



A 10-month-old girl is noted to have dry skin in the perioral area. A topical corticosteroid is applied and within a month, a rash develops in the same distribution.

### **Questions**

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

### **Answers**

- 1. Corticosteroid-induced perioral dermatitis.
- 2. A topical corticosteroid might lead to:
  - skin atrophy,
  - striae,
  - · depigmentation,
  - · telangiectasia,
  - · decreased subcutaneous adipose tissue,
  - rosacea,
  - · folliculitis and
  - steroid-induced acne.

Systemic side-effects that might develop with prolonged use of a topical corticosteroid include:

- Cushing syndrome,
- · adrenal suppression,
- · cataracts,
- · glaucoma and
- · growth retardation.
- 3. Topical immunomodulators, such as tacrolimus and pimecrolimus.

## CASE 16: SORE SMILE



An eight-year-old girl presents with soreness and a burning sensation around her mouth.

## **Questions**

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

#### **Answers**

- 1. Angular cheilitis (Perlèche).
- 2. Angular cheilitis is characterized by erythema, fissuring and maceration at the angles of the mouth. The condition is associated with the collection of moisture at the corners of the mouth. This may result from chronic lip licking, excessive salivation and drooling. In adults, it may result from ill-fitting dentures. Secondary infection with *Candida albicans*, staphylococci, streptococci and saprophytic facultative microorganisms may occur.
- 3. Treatment consists of frequent applications of a bland ointment. Secondary infections should be treated accordingly.

## CASE 17: BROWN BLOTCHES



A 48-year-old woman has had a brownish pigmentation on the cheeks of her face for six years. The lesions are asymptomatic and she has been otherwise healthy.

### **Questions**

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

### **Answers**

- 1. Melasma (Chloasma).
- 2. Melasma is characterized by hypermelanotic macules that typically occur in sun-exposed areas, such as the upper cheek and forehead. The condition can be idiopathic or associated with pregnancy or the ingestion of an oral contraceptive. Sunlight is a permissive factor but the pathogenesis is otherwise unknown.
- 3. Treatment consists of substitution of another form of birth control for any oral contraceptive, avoidance of sun exposure, use of sunscreen and topical application of lightening agents, such as hydroquinone and retinoic acid.

## CASE 18: BABY'S ORAL CYST



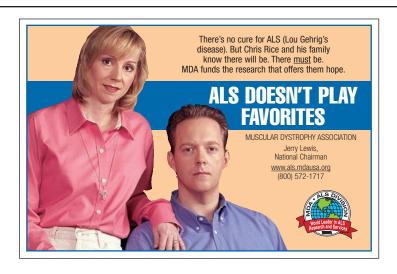
A neonate presents with a whitish lesion along the median palatal raphe.

### **Questions**

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

### **Answers**

- 1. Epstein's pearl.
- 2. Epstein's pearls are the result of the inclusion of epithelial cells along the raphe during palatal fusion. Epstein's pearls appear as pinhead-sized, whitish lesions along the median palatal raphe, or at the junction of the hard and soft palate.
- 3. No treatment is necessary. Epstein's pearls are often spontaneously shed within a few weeks to a few months after initial presentation.



## CASE 19: BULGING BELLY



An eight-month-old infant was noted to have a mass bulging from the upper portion of his abdomen. The mass was more noticeable in the supine position and especially when the infant cried.

### **Questions**

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

### **Answers**

- 1. Diastasis recti.
- 2. Diastasis recti is characterized by a midline protrusion in the epigastrium between the rectus muscles. The abnormality is caused by a weakness of the *linea alba* and is more common in premature infants. The protrusion is most noticeable in situations that favor an increase in intra-abdominal pressure, such as the supine position and is especially prominent when the infant cries.
- 3. The condition usually resolves with time. No treatment is necessary.