



### Test your knowledge with multiple-choice cases

#### This month - 6 cases:

| 1. | Asymptomatic Macules  | p.47 | 4. Ringed Pustules         | p.52 |
|----|-----------------------|------|----------------------------|------|
| 2. | Tongue Discolouration | p.49 | 5. Skin-Coloured Bumps     | p.53 |
| 3. | A Scaling Papule      | p.50 | 6. An Intensely Itchy Rash | p.55 |

## Case 1

# Asymptomatic Macules

A 50-year-old gardener presents with multiple, hypopigmented macules, mainly on both forearms, which have been present for years. The lesions are asymptomatic. His past health is unremarkable. On examination, the macules are around 5 mm in diameter, with smooth surfaces and well-defined borders. The rest of the examination is essentially normal.

## What is your diagnosis?

- a. Vitiligo
- b. Leprosy
- c. Idiopathic guttate hypomelanosis
- d. Pityriasis versicolour

#### Answer

Idiopathic guttate hypomelanosis (answer c) is smooth-surfaced, porcelain-white macules. The lesions are usually:

- multiple,
- 2 mm to 6 mm in diameter,
- asymptomatic and
- are most common on sun-exposed areas of the extremities. mauth

extremities. Idiopathic guttate hypomelanosis occurs in all races and skin types but is strikingly common in African Americans. The exact etiology is not known but may correlate with age-related somatic mutation of



melanocytes with a resulting reduction in the number of dopa-positive melanocytes and pigment granules.

Treatment is not necessary except for cosmetic characterized by discrete, well-circumscribed, purposes. No effective treatment is actually yet available. The lesions may improve with the intralesional injection of triamcinolone and cryotherapy with liquid nitrogen. The use of sunscreen is recommended as a preventive measure.

> Alexander K. C. Leung, MBBS, FRCPC, FRCP (UK and Irel), is a Clinical Associate Professor of Pediatrics, University of Calgary, Calgary, Alberta.

James C. W. Kong, MBBS, is a Consultant in the Health Wise Medical Group, Hong Kong, China.

# Tongue Discolouration

A 27-year-old female is bothered by the cosmetic appearance of her tongue. She notes that the tongue is asymptomatic, but has looked odd to her for the past couple of years.

### What is your diagnosis?

- a. Geographic tongue
- b. Scrotal tongue
- c. Global tongue
- d. Fissured tongue
- e. Candida infection

#### Answer

Geographic tongue (answer a) or benign migratory glossitis is a benign condition affecting 1% to 3% of the population. Most patients find this condition asymptomatic, but occasionally hot and spicy foods can be discomforting.

Most patients find this condition asymptomatic, but occasionally hot and spicy foods can be discomforting.

This condition is more common in adults, with both genders being equally affected. The etiology is uncertain, but it is felt to be a localized form of



psoriasis with a genetic basis. This condition presents with:

- erythema,
- atrophy of filiform papillae and
- a surrounding white raised border.

The lesions appear to migrate—as one area heals, a newly affected area may develop. A biopsy is rarely necessary for the diagnosis.

Patients should be reassured as to the benign nature of this condition. If treatment is requested because of discomfort or cosmesis, topical steroids or retinoids can be tried with some success.

Benjamin Barankin, MD, FRCPC, is a Dermatologist, practicing in Toronto, Ontario.

# A Scaling Papule

This gentleman presented with this lesion, which he has had for the last few years.

## What is your diagnosis?

- a. Basal cell carcinoma
- b. Keratoacanthoma
- c. Seborrheic keratosis
- d. Squamous cell carcinoma
- e. Verruca

### Answer

Squamous cell carcinoma (SCC) (answer d) of the skin is often asymptomatic, although patients may complain of itching or pain. SCC appears as a scaling, hyperkeratotic papule or nodule. It is usually on sunexposed skin and may ulcerate. Occasionally, SCC develops in sites of:

- chronic inflammation or ulceration (as in discoid lupus erythematosus or hidradenitis suppurativa), or
- in sites of radiation therapy or burns.

 $T^{his}$  condition is often asymptomatic, although patients may complain of itching or pain.

In these instances, the clinical appearance may be more subtle. Such SCC are at high risk for recurrence or metastasis.



Other high-risk sites are the:

- lower lip,
- ear,
- digits,
- scalp and
- penis.

Cryotherapy or electrodesiccation and curettage should be used only for superficial, small, low-risk lesions. Surgical excision and primary closure, the time-honored method, is more likely to be curative for high-risk lesions and has the advantage that excision margins can be evaluated by the pathologist. Radiation therapy is generally reserved for large lesions in the elderly.

Hayder Kubba graduated from the University of Baghdad, where he initially trained as a Trauma Surgeon. He moved to Britain, where he received his FRCS and worked as an ER Physician before specializing in Family Medicine. He is currently a Family Practitioner in Mississauga, Ontario.

# Ringed Pustules

One week after wrestling, this 20-year-old male noted several pustules on his arm which quickly evolved into rings with a vesicular border.

## What is your diagnosis?

- a. Herpes gladiatorum
- b. Ringworm
- c. Impetigo
- d. Friction burn
- e. Syphilis

#### Answer

The rapid development of ringworm (answer b), also known as tinea corporis, especially with a vesicular border and no scaling, is quite unusual.

The rapid development of this condition, especially with a vesicular border and no scaling, is quite unusual.

A vesicular eruption following contact sports is more often due to a herpes simplex infection or impetigo.



However, cultures showed the causative agent in this case to be Trichophyton tonsurans. He quickly improved with topical antifungals.

Stanley Wine, MD, FRCPC, is a Dermatologist in North York, Ontario.



# Skin-Coloured Bumps

A 20-year-old man presents with multiple, skin-coloured papules on the anterior chest. The lesions are asymptomatic and have been present since adolescence. Gentle stroking of the lesion does not result in any cutaneous reaction. There is no *café-au-lait* spots noted.

### What is your diagnosis?

- a. Mastocytomas
- b. Neurofibromas
- c. Eruptive vellus hair cysts
- d. Lipomatosis

#### Answer

Eruptive vellus hair cysts (answer c) are characterized by multiple smooth-surfaced, dome-shaped, soft papules ranging in size from 1 mm to 4 mm in diameter. The lesions are flesh-coloured to bluish brown. The anterior chest is the site of predilection. Less commonly, the lesions can be found on the:

- face,
- neck,
- posterior trunk,
- · buttocks and
- · extremities.

The peak age of onset is between four and 18-years-of-age. The lesions are usually asymptomatic. Occasionally, they may become infected.

Histologically, the lesions are lined by stratified squamous epithelium and filled with laminated keratin and fragments of vellus hairs. The condition is



associated with mutation of the gene that encodes keratin 17. An autosomal dominant mode of inheritance has been described.

Eruptive vellus hair cysts are often self-limited, lasting a few months to a few years. Treatment is usually not necessary, except for cosmetic reasons. Treatment options include:

- topical retinoic acid or lactic acid,
- electrodesiccation, or
- laser ablation.

Alexander K. C. Leung, MBBS, FRCPC, FRCP (UK and Irel), is a Clinical Associate Professor of Pediatrics, University of Calgary, Calgary, Alberta.

James C. W. Kong, MBBS, is a Consultant in the Health Wise Medical Group, Hong Kong, China.



# An Intensely Itchy Rash

A 36-year-old gentleman presents with a very itchy rash on his lower abdomen and penis for the last three weeks. The rash becomes intensely itchy during bedtime, which wakes him from sleeping. His wife also started complaining about the same rash under her breasts.

### What is your diagnosis?

- a. Bed bugs
- b. Pubic lice
- c. Folliculitis
- d. Contact dermatitis
- e. Scabies

#### Answer

Scabies (answer e) is an intensely pruritic contagious skin infestation caused by a female mite, also known as Sarcoptes scabiei. It is generally associated with poor living conditions and is also common in hospitals and nursing homes. Most patients present with intense itching that is usually more severe at night. It is caused by an acquired sensitivity to the mite or fecal pellets and is usually noted one to four weeks after the primary infestation.

A physical examination can show red papules, excoriations and, occasionally, vesicles.

Areas of predilection are interdigital web spaces, wrists, anterior axillary folds, periumbilical skin and genitals. In infants and small children, the palms, soles, face, neck and scalp are often involved.

One should look carefully for classic linear burrows, particularly in the interdigital spaces and on



the wrists and ankles. Diagnosis is made on the clinical presentation and on the microscopic demonstration of the mites, ova and fecal pellets from scraped skin.

Treatment of choice nowadays is permethrin 5% cream which is applied at bedtime to skin from neck to soles and washed off in the morning or after 12 hours. This treatment should be repeated after seven days. Clothing, underwear and towels used in the 48 hours before treatment must be laundered in hot water. Also, family members in the same house should be considered for the treatment. Other choices are lindane 1% cream and oral ivermectin.

cme

Hanan Al-Hammadi, MD, CCFP, is an Attending Staff in Family Medicine in Doha, Qatar.

Anwar Al Hammadi, MD, FRCPC, is a Fellow in Cosmetic Dermatology at Mount Sinai School of Medicine in New York, New York.