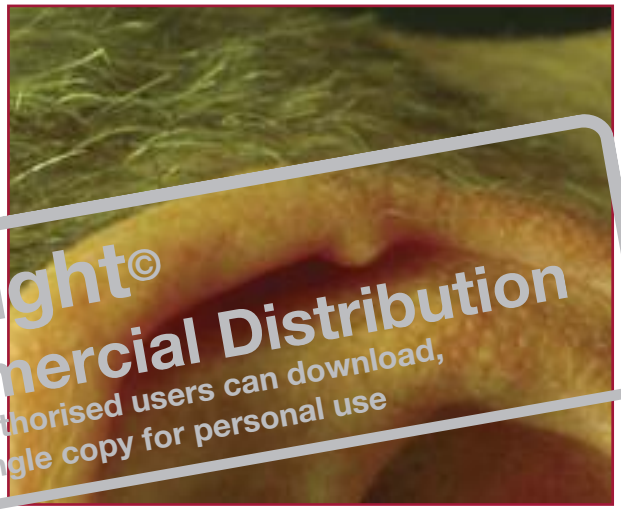
This month – 10 cases:

Case 1

Enlarging Ear Rim Lesion

This 50-year-old man has noted a slowly enlarging lesion on his ear rim over the past four years. It has become whiter in colour and is not symptomatic.



What is your diagnosis?

a. Basal cell carcinoma
b. Chondrodermatitis nodularis helicis
c. Solar keratosis
d. Squamous cell carcinoma
e. Tophaceous gout

Answer

Tophaceous gout **(answer e)** is due to crystalized uric acid just under the skin. These nodular lesions occur on ears, fingers, toes, or joints. As they get larger, they become more palpable, moveable, and whiter or cream coloured. They are likely to be painful if they are located around a joint. Most commonly, they involve middle-aged to elderly men.

While such lesions on the ear regularly occur, the diagnosis of gout is the first indicator. If uric acid levels remain elevated, the lesions get larger and may cause erosion of the cartilage as they would with bone, where secondary pain would be present.

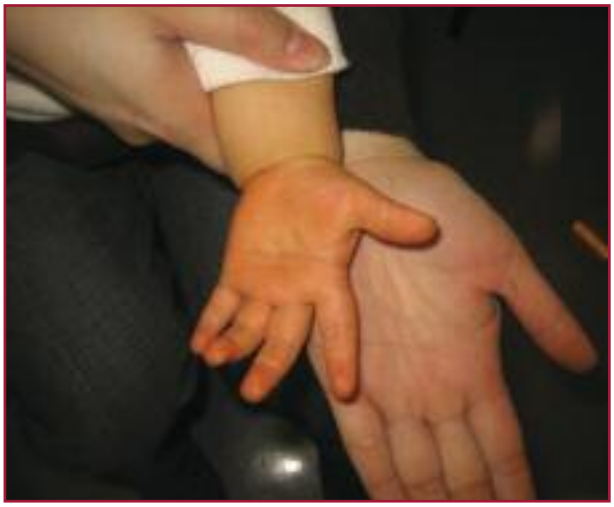
Reducing uric acid levels in the blood will result in the elimination of the tophus.

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

Case 2

Yellow-pigmented Skin

An 18-month-old infant presents with "yellow skin," which has been noticeable for the past five to six months. There is no scleral icterus, no acholic stools, and no dark urine. There is particular accentuation of the palms, the soles, and the glabellar area. There is no involvement of the mucous membranes and no associated pruritus.



What is your diagnosis?

a. Jaundice
b. Lycopenemia
c. Hemochromatosis
d. Carotenemia
e. Bronze baby syndrome

Answer

Carotenemia **(answer d)** is a common condition in children primarily due to the digestion of excessive amounts of carrots, but also other carotene-containing foods, such as squash, pumpkins, sweet potatoes, peaches, mangos, and papayas. The condition is seen primarily in infants, but occasionally in older children and adults, and manifests as a yellowish-orange discoloration of the skin, most commonly on the palms and soles. Carotenemia is a harmless and benign disorder, requiring no intervention, aside from a reduction in dietary carotene. However, carotenemia unassociated with the ingestion of excessive carotene may be a sign of systemic disease, particularly hypothyroidism, diabetes mellitus, anorexia nervosa, as well as hepatic and renal disease.

A positive history of excessive dietary carotene intake together with a high beta serum carotene level can be used to confirm the diagnosis of carotenemia.

In contrast, jaundice is a very common condition caused by hyperbilirubinemia resulting in yellowing of the skin, sclera, and other mucous membranes. The presence of jaundice in children and adults is almost always indicative of an underlying pathological process. Carotenemia is often mistaken for jaundice; however, simple clinical signs can be used to rule out the presence of jaundice. These include a lack of involvement from the sclera and mucous membranes with no associated pruritis, along with no change in the colour of urine or stool. A diagnosis of jaundice can be confirmed by the presence of elevated plasma bilirubin levels.

Lycopenemia manifests as reddish-yellow skin discoloration due to the ingestion of large amounts of tomatoes and other lycopene-containing foods.

Hemochromatosis is a common inherited disorder of iron metabolism in which increased intestinal absorption of iron results in deposition of iron in multiple organs. The skin is involved in patients with advanced stages of the disease and it is typified by hyperpigmentation with a characteristic metallic gray hue. These skin changes are sometimes referred to as bronzing, which results from increased melanin and iron in the dermis.

Bronze baby syndrome describes infants who develop a grayish-brown discolouration of the skin, serum, and urine while undergoing phototherapy for neonatal jaundice.

Marko Yurkovich, is a second year medical student at the University of British Columbia, Vancouver, British Columbia.

Dr. Joseph M. Lam, is a Pediatrician with fellowship training in Pediatric Dermatology. He practices in Vancouver, British Columbia.

Case 3

Supraorbital Enlarging Lesion

This 19-year-old male presents with a gradually enlarging lesion on the right supraorbital area. It is mobile and soft.

What is your diagnosis?

a. Melanoma
b. Basal cell carcinoma
c. Epidermal inclusion cyst
d. Osteoid osteoma

Answer

The correct diagnosis is epidermal inclusion cyst **(answer c)**. Epidermal inclusion cysts are benign nodules occurring in the dermis, consisting of a true epithelial lining usually with keratin in the central portion of the cyst. These lesions can be differentiated from osteoid osteomas, or bony growths, in that osteoid osteoma will typically be painful and fixed to the underlying tissue. Basal cell carcinoma is uncommon in younger patients. A nodular basal cell also has a different morphologic appearance, typically appearing as a skin coloured to transluscent papule or nodule with telangiectasias, and may have central crusting with a raised or rolled border.

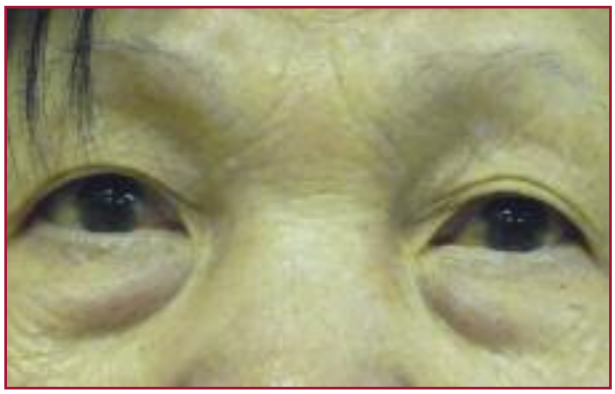
These patients can be reassured about the benign nature of the lesions. The lesion can be excised, making a simple incision over the cyst and extracting the cyst and its contents. It is important to remove the entire cyst and its contents, because these lesions are prone to recurrence.

Richard Langley, MD, FRCPC, Professor of Dermatology, Director of Research, Division of Dermatology, Dalhousie University, Halifax, Nova Scotia.

Case 4

Triangular, Fleshy Growth on Eyes

A 70-year-old woman presents with a triangular fleshy growth on the nasal aspects of both eyes. The abnormal tissue has been present for two to three years. There is no ocular itchiness. Her vision is grossly normal.



What is your diagnosis?

a. Pinguecula
b. Pterygium
c. Conjunctival dermolipoma
d. Conjunctival nevus

Answer

Pterygium **(answer b)** results from degeneration of normal subconjunctival tissue, which subsequently proliferates as a fibrovascular growth. The word "pterygium" is derived from the Greek word for "wing." Vascular endothelial growth factor (VEGF) plays an important role in the pathogenesis. The pathognomonic lesion is a fleshy, raised, triangular thickening of the bulbar conjunctiva that extends onto the cornea. The condition is more prevalent in older individuals, especially those living in areas with sunny and windy climates or at high altitudes. Invasion of the pterygium into the cornea may result in astigmatism. In longstanding cases, the pterygium might encroach onto the pupil and impair vision. The lesion is cosmetically unsightly and can generate frustration in affected patients.

Affected patients should be advised to wear sunglasses that provide ultraviolet protection and to use lubricating eye drops to prevent further progression. Surgical removal of the lesion is indicated if vision is impaired.

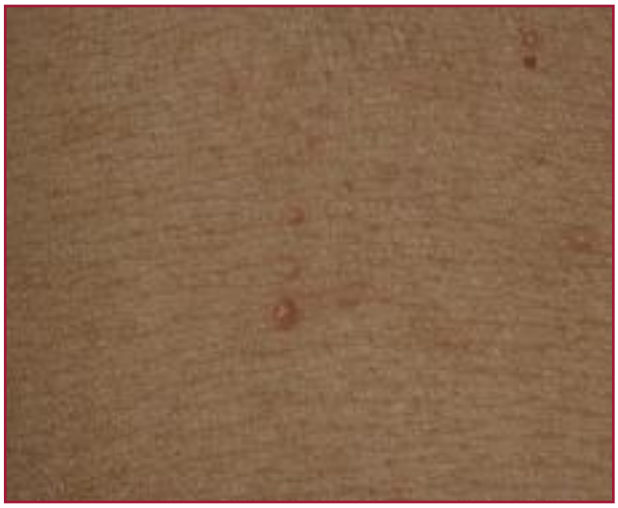
Alexander K.C. Leung, MBBS, FRCPC, FRCP(UK&Irel), FRCPCH, is a Clinical Professor of Pediatrics, the University of Calgary, Calgary, Alberta.

Michael Chu, OD (Honours), is an optometrist in Calgary, Alberta.

Case 5

Multiple Pruritic Papules

This 34-year-old woman presents with a sudden eruption of multiple, pruritic papules on the abdomen.



What is your diagnosis?

a. Grover's disease
b. Polymorphous light eruption
c. Varicella zoster
d. Folliculitis

Answer

Grover's disease **(answer a)**, is a relatively uncommon and usually transcient acantholytic dermatosis. It is a relatively rare, usually transient, skin disorder characterised by the sudden appearance of many small, red, itchy, pruritic papules. Papules may persist for several months to years. Patients typically present with multiple lesions on the torso, chest, back and thighs; however, lesions may spread to the upper extremities, neck, and shoulders.

Grover's disease is most common in men over 60-years-of-age. The etiology is not known, but it is believed that the disease may be brought on by extreme temperatures. The peak incidence of Grover's disease occurs in the winter. Exposure to sunlight may also initiate disease or exacerbate existing lesions.

Lesions often resolve without treatment; however, topical steroids may be used to control itching. If recommended, ultraviolet B radiation therapy may also be an effective option for treatment.

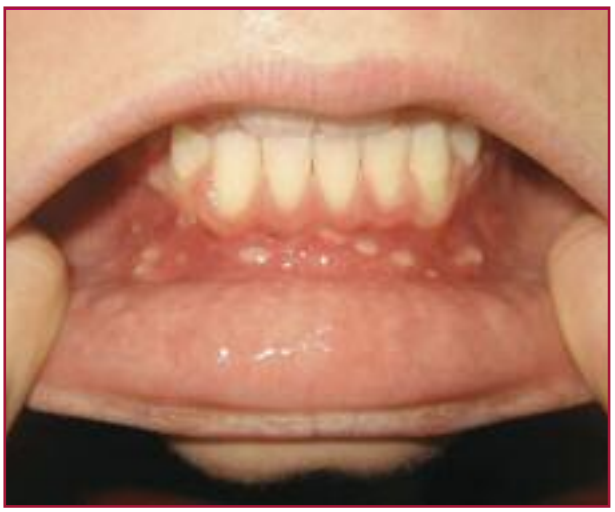
Lesley Latham, MSc, ia a Research Assistant, Division of Dermatology, Dalhousie University, Halifax, Nova Scotia.

Richard Langley, MD, is a Professor of Dermatology, Director of Research, Division of Dermatology, Dalhousie University, Halifax, Nova Scotia.

Case 6

Eruptions in Mucous Membrane

A 16-year-old girl presents with painful shallow erosions over the mucous membranes. She has no other systemic symptoms and is otherwise well.



What is your diagnosis?

a. Behçet's disease
b. Systemic lupus erythematosus
c. Celiac disease
d. Aphthous ulcers
e. Crohn's disease

Answer

All of the above choices are possibilities. However, given the absence of other symptoms, the most likely diagnosis is aphthous ulcers **(answer d)**. Aphthous ulcers, or canker sores, are one of the most common painful diseases affecting the oral mucosa in children. It often presents with single or multiple shallow erosions or ulcerations. They present initially as a focal erythema followed soon after by tiny, superficial gray-white erosions, as seen above. Aphthous ulcers are multifactorial in origin and may occur in response to a variety of triggers, including stress, trauma, hormonal changes, and infection. Treatment is primarily symptomatic and may include topical corticosteroids and topical and/or oral analgesics.

It is unlikely to be Behçet's disease as the other diagnostic criteria, including cutaneous or genital ulcers and ocular inflammation, are absent. Oral ulcers seen in Behçet's also tend to be less painful.

Oral aphthous ulcers are a common finding in pediatric patients with Crohn's disease. However, it is a nonspecific finding, and the absence of systemic symptoms makes this diagnosis less likely.

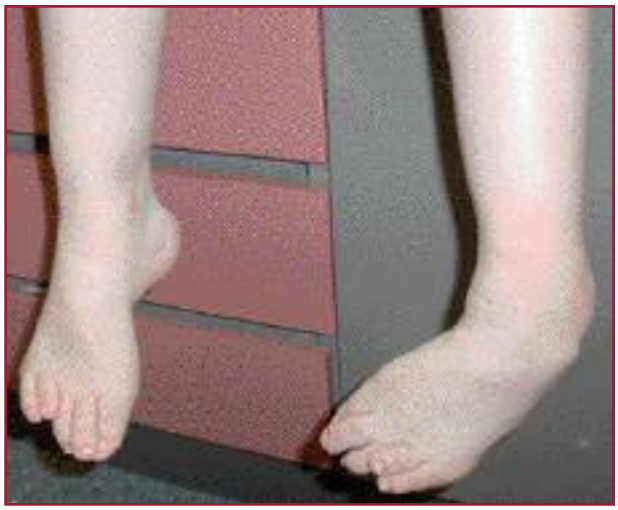
Tram Nguyen, is a Second Year Pediatric Resident at McMaster University.

Joseph M Lam, is a Pediatrician with fellowship training in Pediatric Dermatology. He practices in Vancouver, British Columbia.

Case 7

Leg Deformity

A 13-year-old girl, was brought in by her mother who requested treatment for her leg deformity, which developed a few months after she was born and has been gradually increasing ever since. The mother had an uneventful pregnancy and her daughter was born vaginally at 40 weeks of gestation.



What is your diagnosis?

a. Myotonic muscular dystrophy
b. Talipes equinovarus
c. Cerebral palsy
d. Arthrogryposis multiplex congenita

Answer

Talipes equino varus is a common ("classic") form of clubfoot **(answer b)**. With this type of clubfoot, the foot is turned in sharply, and the person seems to be walking on their ankle.

It's late occurrence demonstrates that it was not caused by uterine factors, such as oligohydraminios, amniotic band syndrome, or large fibroid, but rather by an inherited disease.

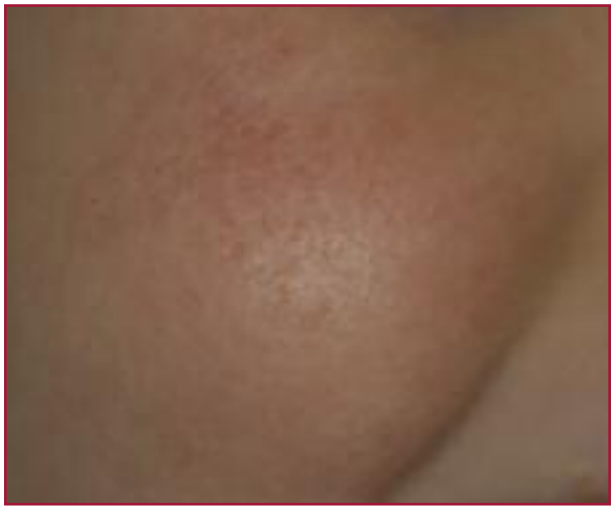
After conducting a full investigation, it was discovered that Charcot-marie-tooth syndrome (CMT), (also known as hereditary sensorimotor neuropathy, or peroneal muscular atrophy), is a hereditary factor in this patient's history. It is a heterogeneous inherited disorder of nerves (neuropathy) that is characterized by loss of muscle tissue and touch sensation, predominantly in the feet and legs, but also in the hands and arms in the advanced stages of disease. Presently incurable, this disease is one of the most common inherited neurological disorders, with 37 people in 100,000 affected.

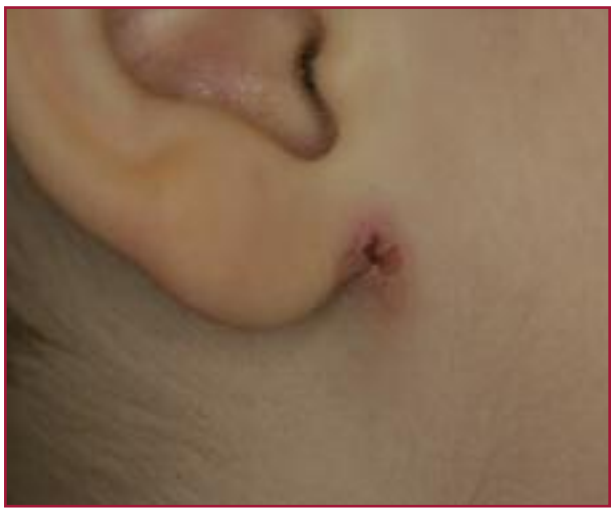
Hayder Kubba, MBChB, LMCC, CCFP, FRCS(UK), DFFP, DPD, graduated from the University of Baghdad, where he initially trained as a Trauma Surgeon. He moved to Britain, where he received his FRCS and worked as an ER Physician before specializing in Family Medicine. He is currently a Family Practitioner in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

Case 8

Scaling Pruritis

A three-year-old boy presents with well defined scaling erythematous patches on his cheeks, fissuring and crusting on his earlobes, and a few scattered scaling patches on the forearms and abdomen. He has been using hydrocortisone cream 1% and Diphenhydramine without significant improvement. He also has a history of asthma.





What is your diagnosis?

a. Atopic dermatitis
b. Irritant dermatitis
c. Psoriasis
d. Seborrheic dermatitis
e. Impetigo

Answer

Atopic Dermatitis (AD) **(answer a)** is a chronic, recurrent, pruritic skin condition that affects 15 to 20% of children. It is commonly associated with allergic rhinitis (hay fever) and asthma, and this is often referred to as an "atopic triad." Many patients diagnosed with only AD will develop hay fever and/or asthma later in life.

AD develops most often in infancy or childhood as a result of complex genetic, environmental, and immunologic interactions. Clinically, it is characterized by pruritic scaling, erythematous, patches, papules, and plaques on the face and extremities. Clinical presentation can vary with age. Infantile AD presents as scaly erythema often localized to the chin and cheeks, and in childhood, AD can present as papular lichenified crusts and plaques in flexural areas.

Adult AD presents as localized lichenification and inflammation in flexural areas and may also involve the hands, periorbital area, and anogenital region. Persistent scratching and rubbing can lead to thickening of the skin known as lichenification. It is also common for vesicles and fissures to develop.

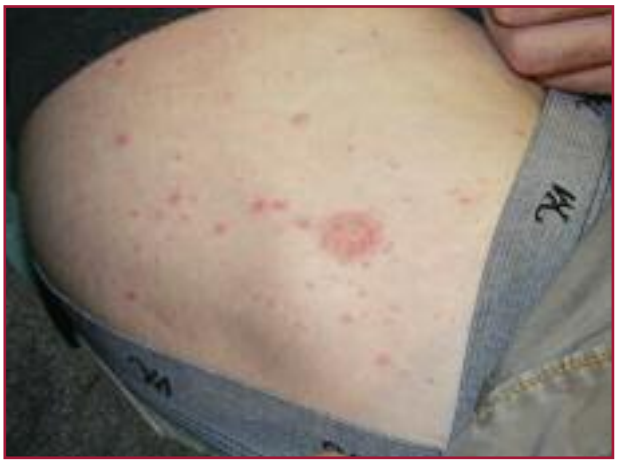
Management of AD should include education on avoidance of irritants, such as allergens and rubbing of the affected area. Emollients should be used regularly; steroidal or nonsteroidal anti-inflammatory agents can be used for mild cases. More severe cases may need to be treated with mid- to high-potency corticosteroids.

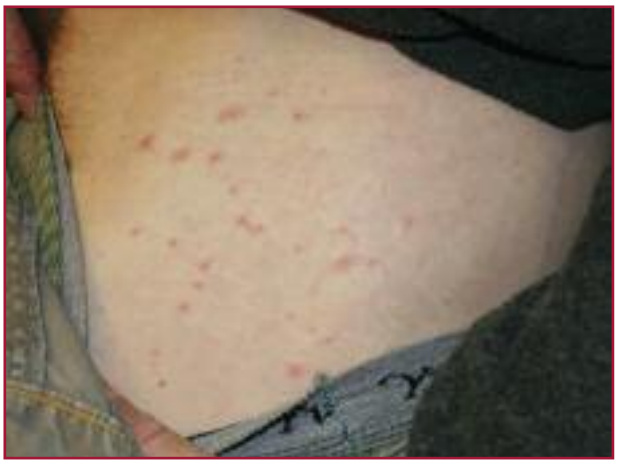
Richard Langley, MD, FRCPC, is a Professor of Dermatology, Director of Research, Division of Dermatology, Dalhousie University, Halifax, Nova Scotia.

Case 9

Non-pruritic Rash

This 22-year-old male presented with a history of a non-pruritic rash on both sides of his back; it has been present for two weeks. It began with one single patch on the right side of his back. His health is generally good, and he has no fever or any drug history.





What is your diagnosis?

a. Tinea corporis
b. Pityriasis rosea
c. Secondary syphilis
d. Guttate psoriasis

Answer

Pityriasis rosea **(answer b)** is an acute, self-limited disorder of unknown etiology characterized by scaly, oval papules and plaques that mainly occur on the trunk. The generalized eruption is preceded in most patients by the appearance of a single lesion of 2 to 5 cm in diameter known as a "herald patch." A few days later, many smaller plaques appear, mainly on the trunk, but also on the upper arms and thighs. Individual plaques are oval, pink, and have a delicate peripheral scale. Itching is mild or moderate, and eruptions fade spontaneously in four to eight weeks. Teenagers and young adults tend to be affected. The cause is unknown, but epidemiological evidence of "clustering" suggests an infective etiology (most likely a virus). In most cases, treatment is not necessary and there generally is no recurrence.

Jerzy K. Pawlak, MD, MSc, PhD, is a General Practitioner, Winnipeg, Manitoba.

T.J. Kroczak is a General Practitioner, Winnipeg, Manitoba.

Case 10

Coating on Axillary Hair

This 60-year-old man has been aware of a coating on his axillary hair for six months. It is asymptomatic except for a slight odour.

What is your diagnosis?

a. Trichomycosis axillaries
b. Nit casts due to pediculosis
c. Mal de Meleda
d. Piedra

Answer

Trichomycosis Axillaries **(answer a)** is caused by a diphtheroid, *corynebacterium minutissimum*, which also causes erythrasma.

It may coat the axillary or pubic hair with yellowish, red, or black sheaths or fine papules. Hyperhidrosis may play a role in the over growth of this otherwise normal organism.

It will respond to topical or oral erythromycin, but it can simply be treated by shaving the involved area.

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