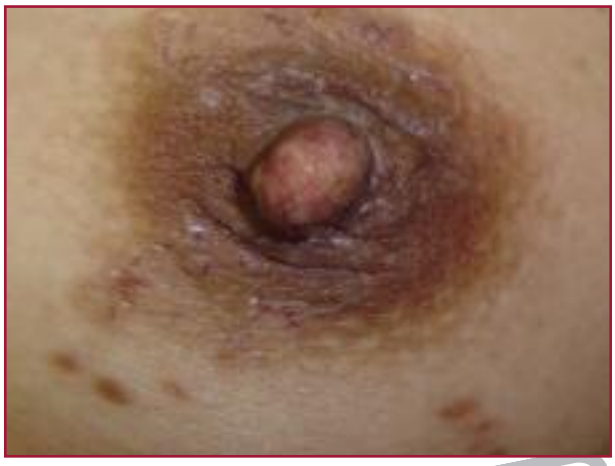
This month – 8 cases:

Case 1

A Tender Nipple

This 51-year-old woman noted a tender eruption on her left nipple area over a six month period of time. Recently, papules have developed on her breast.



What is your diagnosis?

a. Bowen's disease
b. Intraductal carcinoma
c. Psoriasis
d. Contact dermatitis
e. Lichen planus

Answer

While lichen planus **(answer e)** is most recognized as a widespread eruption, it can at times involve only a single area of the skin, scalp, mucous membranes or nails. The condition is felt to be a T cell-mediated autoimmune disorder.

When mucous membranes are involved, the eruption may be asymptomatic or tender. When skin is involved, varying degrees of itch ensue.

Characteristically, the lesions are:

- violaceous,
- polygonal-shaped and
- flat-topped.

The surface may be shiny or have fine white lines called "wickham's striae."

In this case, the breast shows characteristic clinical features of lichen planus.

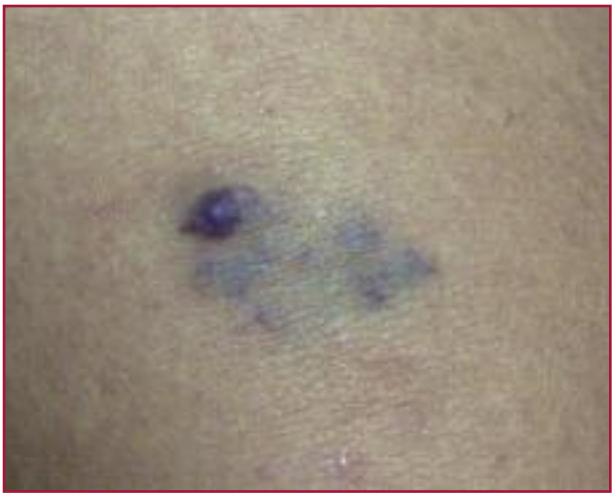
Treatment is often symptomatic using topical steroids. More widespread involvement might include oral steroids or metronidazole. Lichen planus may be self-limited with time, often leaving some degree of post-inflammatory hyperpigmentation.

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

Case 2

A Bluish Lesion

A 10-year-old boy presents with an asymptomatic, bluish, soft, compressible lesion on the right thigh since birth. It gets bigger in an upright position.



What is your diagnosis?

a. Venous malformation
b. Mongolian spot
c. Capillary hemangioma
d. Pilomatricoma

Answer

Venous malformation **(answer a)** is a slow-flow vascular malformation present at birth. The lesion is soft, compressible, non-pulsatile and deep blue in colour. Expansion with dependent positioning is a unique feature.

Histologically, the lesion is composed of thin-walled vessels or sinuses lined with endothelium and surrounded by a fibrous connective tissue stroma. These vessels or sinuses drain to normal adjacent conducting veins. They may involve skin, subcutaneous tissue and mucosa and may permeate deeper structures, such as muscles.

Venous malformations are usually segmental or focal. Most lesions are asymptomatic. They may become painful as a result of entrapment and compression of nerve fibres or from venous stasis and thrombosis.

Phleboliths are the hallmarks of venous malformation and result from local venous thrombosis. Other possible complications include:

- ulceration,
- infection and
- hemorrhage.

Chronic localized intravascular coagulopathy may occur due to consumption of clotting factors. Giant venous malformations may be associated with platelet sequestration, which may lead to intravascular coagulopathy or thrombocytopenia (Kasabach-Merritt syndrome). Venous malformations in the limb may be complicated by osteoporosis, diaphyseal thinning and lytic lesions.

Large venous malformations can be cosmetically unsightly and may lead to psychological disturbance. Most venous malformations are isolated, although they may occur in association with Maffucci syndrome and blue rubber bleb nevus syndrome.

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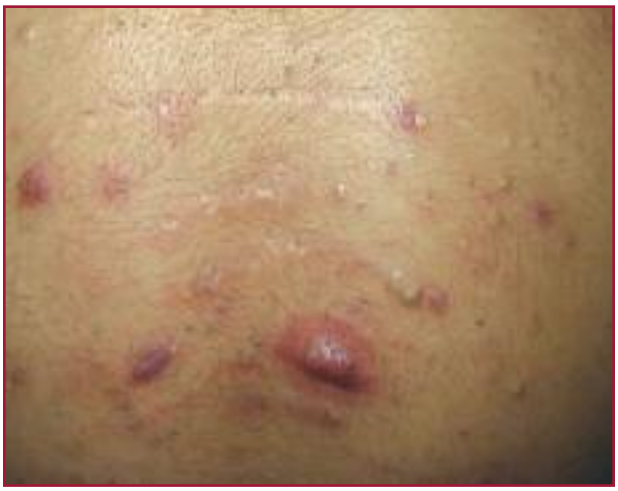
Case 3

Various Comedones

A 21-year-old male presents with various comedones, papules, nodules and cysts on his back. He is otherwise healthy, but is bothered by the appearance and occasional tenderness.



What is your diagnosis?

a. Rosacea
b. Pustular psoriasis
c. Acne vulgaris
d. Folliculitis
e. Tuberous sclerosis

Answer

Acne vulgaris **(answer c)** affects approximately 90% of people at some point in their lives. It presents as:

- non-inflammatory comedones (*i.e.*, blackheads and whiteheads),
- papules,
- pustules,
- nodules and
- cysts.

It typically affects the face, upper chest and back, with occasional upper arm involvement. The key factors underlying development of acne are:

- follicular epidermal hyperproliferation and plugging,
- excess sebum,
- involvement of *Propionibacterium acnes* bacteria and
- subsequent inflammation.

Various treatment options are employed, but generally, if there is trunk involvement, oral systemic therapy is required. In this gentleman, a two- to three-month trial of oral tetracycline-family antibiotics along with topical therapy is reasonable. If non-responsive, either a different antibiotic can be tried, or oral isotretinoin should be considered.

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

Case 4

A Sore Throat

This lady presented with sore throat, low grade fever, anorexia, malaise, cervical lymphadenopathy and splenomegaly. Her complete blood count revealed mild anemia.

What is your diagnosis?

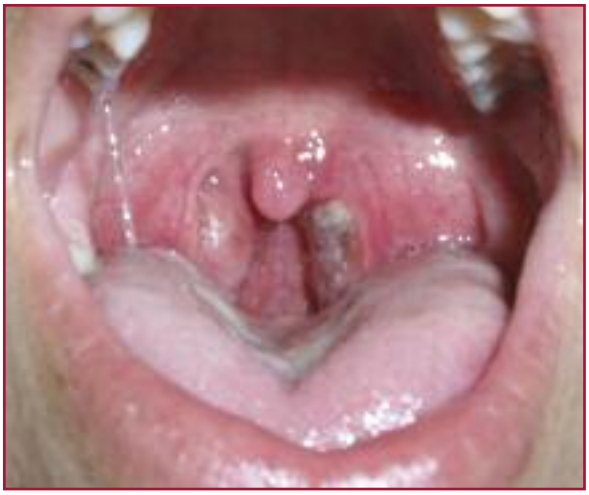
a. Follicular tonsillitis
b. Infectious mononucleosis
c. Tonsillar tumour
d. Quinsy

Answer

Infectious mononucleosis (glandular fever) **(answer b)** is a common disease in young adults, although patients may be of any age, which may pass unnoticed or cause acute illness—rarely followed by months of lethargy. It is caused by Epstein-Barr virus (EBV), which preferentially infects B lymphocytes. There follows a proliferation of T cells (the "atypical" mononuclear cells) which are cytotoxic to EBV-infected cells.

Blood film shows a lymphocytosis with many atypical lymphocytes (*e.g.*, 20% of all white blood cells). Such cells may be seen (usually in fewer numbers) in many viral infections (especially cytomegalovirus), toxoplasmosis, drug hypersensitivity, leukemias, lymphomas and lead intoxication.

Heterophil antibodies develop early and disappear after around three months. These antibodies agglutinate sheep red blood cells.



Treatment includes:

- bed rest,
- avoidance of alcohol and
- rarely, recommended prednisone.

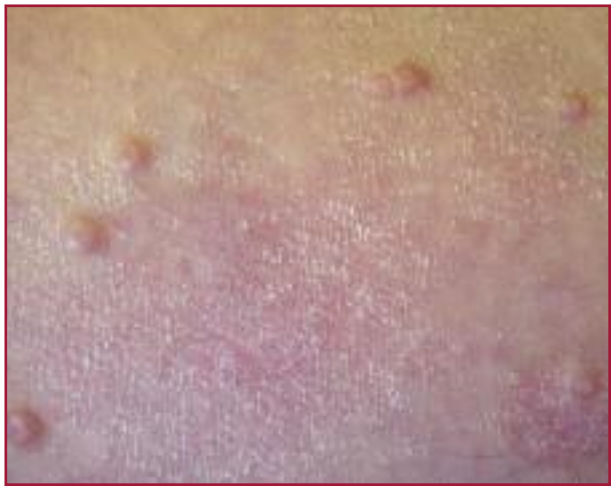
Complications include low spirits, depression and lethargy, which may persist for months. Although rare, other complications include thrombocytopenia, ruptured spleen, upper airway obstruction (may need observation in intensive therapy unit), secondary infection, pneumonitis, aseptic meningitis, Guillain-Barre syndrome, renal failure, lymphoma and autoimmune hemolytic anemia.

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.

Case 5

Asymptomatic Papules

This 10-year-old child presents with asymptomatic, skin-coloured papules with surrounding eczema.



What is your diagnosis?

a. Chickenpox
b. Warts
c. Psoriasis
d. Molluscum contagiosum
e. Bug bites

Answer

Molluscum contagiosum **(answer d)** is characterized by skin-coloured, 2 mm to 6 mm in size, discrete, dome-shaped papules with a central umbilication that may appear on any area of the body. Larger lesions may become erythematous and occasionally purulent. There is sometimes dermatitis surrounding the lesions (*i.e.*, molluscum dermatitis). Children with atopic dermatitis and immunocompromised children tend to develop larger numbers of lesions (dozens to hundreds). Any given lesion persists for about two to four months and new lesions keep appearing for several months or even years. Most cases resolve spontaneously in six to nine months.

Molluscum is caused by a highly contagious poxvirus that possesses sophisticated mechanisms for evading the immune system. It is transmitted by person-to-person contact, as well as by fomites. Outbreaks can occur among children attending swimming pools.

As molluscum is usually self-limited and heals without scarring, treatment is not always necessary. There are many treatment options which include:

- manual extraction,
- cryotherapy,
- application of cantharidin,
- podophyllin and similar preparations and
- topical imiquimod.

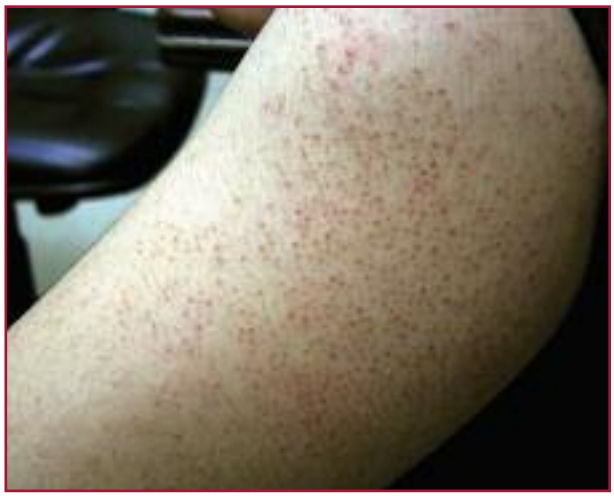
Oral cimetidine is controversial, but may be a useful option in a child that cannot tolerate other modalities. Curettage is discouraged as it may lead to scarring.

Mike Kalisiak, MD, BSc, is a Senior Dermatology Resident, University of Alberta, Edmonton, Alberta.

Case 6

Rough Bumps

A 15-year-old boy presents with minute, discrete, keratotic papules on his arm. The lesions are asymptomatic. The patient is otherwise in good health.



What is your diagnosis?

a. Keratosis pilaris
b. Pityriasis rubra pilaris
c. Lichen spinulosus
d. Folliculitis

Answer

Keratosis pilaris **(answer a)** is characterized by the presence of minute, discrete, keratotic, follicular papules with variable perifollicular erythema. The lesions are not grouped and show no tendency to coalesce to form plaques. The affected skin looks like goose flesh and feels like sandpaper. The lesions are not pruritic. Keratin plugs cannot be expressed with pressure and are usually painless. The lesions can be isolated or widespread and have a predilection for the lateral aspects of the upper arms and thighs.

The disorder usually resolves spontaneously and is less common during adult life.

The condition develops during childhood and reaches a peak during adolescence. The prevalence in adolescents of both genders is estimated to be at least 50% and up to 80% of adolescent girls can be affected. The high prevalence and intensity seen at puberty suggests a hormonal influence. Hyperandrogenism in the presence of obesity is associated with an increased incidence and severity of keratosis pilaris.

The disorder usually resolves spontaneously and is less common during adult life.

Mild cases of keratosis pilaris can be treated with a moisturizing cream or an emollient, such as hydrophilic petrolatum or a 10% to 20% urea cream. More pronounced or widespread lesions require treatment with a keratolytic agent, such as lactic acid, salicylic acid, or urea in combination with a topical corticosteroid or retinoic acid.

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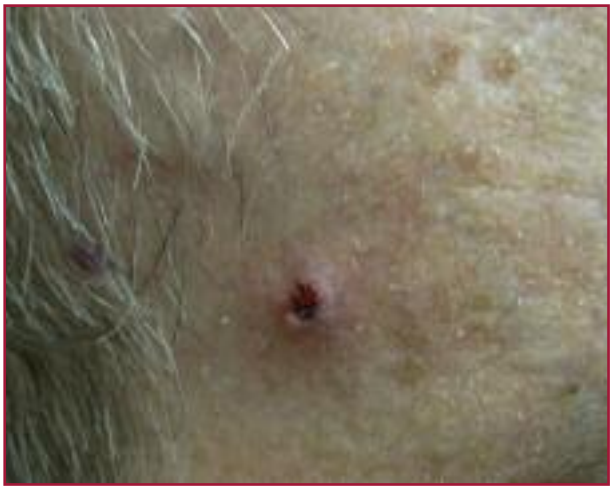
Case 7

A Rapidly-Growing Nodule

A 58-year-old male notes a rapidly growing nodule on his temple. It does not bleed or scab, but he is worried about it.



What is your diagnosis?

a. Basal cell carcinoma
b. Amelanotic melanoma
c. Keratoacanthoma
d. Atypical fibroxanthoma
e. Cutaneous horn

Answer

A keratoacanthoma (KA) **(answer c)** is a common, low-grade tumour that pathologically resembles squamous cell carcinoma (SCC). There are now some dermatologists and pathologists believing it to be a variant of invasive SCC and thus treated similarly. KA is characterized by rapid growth and often self-resolution over several months. Due to rare reports of metastases or invasion (possibly misdiagnosed SCC), surgical treatment is warranted in most cases. Etiologic factors for this tumour include:

- UV radiation,
- immunosuppression,
- smoking,
- HPV,
- tar or pitch exposure,
- trauma and
- genetic factors.

KAs typically affect elderly Caucasians, more commonly affecting males. Other variants of this tumour include eruptive KA of Grzybowski (multiple non-involuting KAs) and multiple Ferguson-Smith KA (rare, autosomal dominant, self-healing, affecting young adults). As well, KA can be a component of the genodermatosis Muir-Torre syndrome, which is most commonly associated with colon cancer.

Treatment options are largely surgical. Occasionally, systemic retinoids are employed for multiple KAs. For poor surgical candidates or those with lesions that, due to size and location, are difficult to excise, intralesional methotrexate, fluorouracil or bleomycin can be effective.

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

Case 8

A Horn-Like Protrusion

A 48-year-old female presents with a six month history of an asymptomatic, dome-shaped, flesh-coloured keratotic papule localized to the distal aspect of her left third finger. She was otherwise healthy. There had been no prior treatment for the lesion.

What is your diagnosis?

a. Ganglion cyst
b. Acquired digital fibrokeratoma
c. Molluscum contagiosum
d. Digital myxoid cyst
e. Verruca vulgaris

Answer

Acquired digital fibrokeratoma (ADFK) **(answer b)** or acral fibrokeratoma is a benign, acquired, solitary, flesh-coloured, dome-shaped papule or horn-like protrusion that has a hyperkeratotic surface.

Most lesions are small and do not exceed 1.5 cm in height or diameter.

The etiology is unknown, although trauma has been implicated. ADFKs tend to predominantly occur on the fingers or toes, near phalangeal joints, although they have been reported on the:

- palms,
- soles and
- other areas of the skin.

Most lesions are small and do not exceed 1.5 cm in height or diameter. The differential diagnosis of ADFKs includes:

- verruca vulgaris,
- pyogenic granuloma and
- cutaneous horns.

A biopsy can be confirmatory. Surgical excison or CO_2 laser destruction is the definitive treatment.

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Samir N. Gupta, MD, FRCPC, DABD, completed his Dermatology Fellowship training at Harvard University and currently practices with a special interest in Laser Dermatology, Toronto, Ontario.