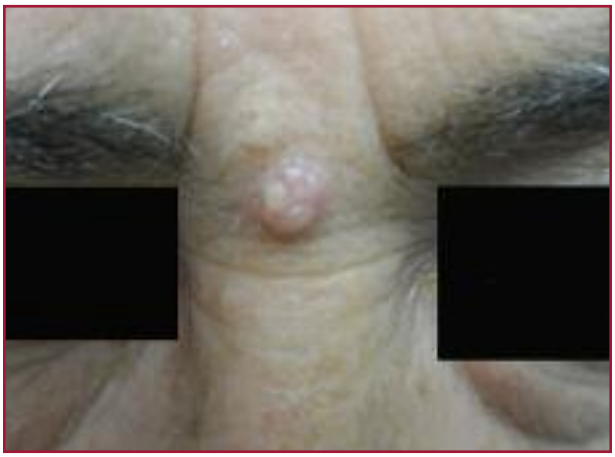
This month — 6 cases:

Case 1

A Lesion between the Eyes

This 70-year-old man developed this lesion over six-months ago. It is firm to the touch and is painless.



What is your diagnosis?

a. Cylindroma
b. Epidermoid cyst
c. Molluscum contagiosum
d. Basal cell carcinoma
e. Proliferating pilar tumour

Answer

A proliferating pilar tumour (also called a proliferating trichilemmal tumour) **(answer e)** is a rare neoplasm arising from the isthmus of the outer root sheath of a hair follicle.

It may range in size from 1 to 10 mm and may bleed, ulcerate, or rupture its content as any cyst. It is usually seen in females over the age of 50. It tends to occur in a pre-existing pilar cyst on the scalp, but it has been known to present on the face, back, and groin.

While they are benign in nature, malignant transformation with local or metastatic spread has been reported; therefore, total excision is recommended.

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Case 2

Perianal Papules

A 13-month-old female presents with raised, skin-coloured and erythematous papules in the perianal area.

What is your diagnosis?

a. Condyloma acuminata
b. Lichen sclerosus et atrophicus
c. Infantile perianal pyramidal protrusions

Answer

Infantile perianal pyramidal protrusions **(answer c)** are pyramidal-shaped, flesh-coloured to pink, soft tissue swellings that occurs in the median raphe. The vast majority of cases affect females. The average age at diagnosis is 14-months. It is most often associated with either constipation or diarrhea, and it may occur secondary to the healing of a perianal fissure. Some cases may represent an unusual presentation for lichen sclerosus et atrophicus. Spontaneous regression of the lesion is common. Observation is recommended. Reassurance as to the benign and, typically, self-resolving nature of the condition should be provided to relieve parental anxiety. This condition may be misinterpreted as a sign of sexual abuse. Although condylomata acuminata are part of the differential diagnosis, infantile perianal pyramidal protrusions can be differentiated from anogenital warts based on their distribution, appearance, and solitary nature.

Condylomata acuminata are HPV-induced lesions of the anogenital tract. Although HPV is a common, sexually transmitted infection, infection may also occur via vertical transmission, autoinoculation, non-sexual heteroinoculation, and fomite spread. Even so, sexual abuse should be excluded in any child presenting with condylomata acuminata. Anogenital warts present as flesh-coloured, soft, verrucous papules that are 1 to 5 mm in diameter. Lesions are usually multiple, occurring in a "mirror-image" pattern on either side of the anus. Treatment is often challenging, but self-resolution occurs in greater than 50% of patients within five years; therefore, observation may be a reasonable initial approach.

Lichen sclerosus et atrophicus is a disorder characterized by sharply defined, small, pink to ivory-white, slightly raised, flat-topped papules a few millimetres in diameter, which coalesce into plaques of various sizes, and they most often affect the anogenital region. This condition primarily affects females, and, although only 10 to 15% of affected individuals have onset prior to 13-years-of-age, 70% of these cases occur before age seven, and the condition has been described in the first weeks of life. In children, mean age of symptom development is five years and diagnosis is 6.7 years. Topical corticosteroids, with super potent steroids for six to eight weeks, is the mainstay of treatment.

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Case 3

Linear Pattern on the Thigh

A red, swelling reaction in a linear pattern occurs in a 14-year-old girl after she has scratched herself on the thigh.

What is your diagnosis?

a. Dermographism
b. Papular urticaria
c. Mastocytosis
d. Contact dermatitis
e. Sea anemone envenomation

Answer

Dermographism **(answer a)** or dermatographism, also known as factitious urticaria or "skin writing," manifests as linear wheals at sites of scratching, trauma, or friction. It is a form of trauma-induced pressure urticaria. A transient, pruritic, erythematous wheal occurs at the site of scratching/trauma/friction and usually fades within two hours. Mucosal involvement seldom occurs, but vulval swelling with sexual intercourse has been reported. Psychological stress may amplify the symptoms in selected patients. It is difficult to interpret skin test results in patients with dermographism. The clinical course is unpredictable but tends to improve with time. The mean duration varies from five to seven years. Patients bothered by this condition can take daily antihistamines until the condition subsides.

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Case 4

Large, Yellow Plaques on the Shin

A 67-year-old, Caucasian female presents with large, yellow plaques on her shins. She notes that they began as three small "spots" over 20-years-ago and have been getting progressively worse. Upon examination, these yellow-brown, sclerotic, annular plaques have well-defined, elevated borders and are waxy in texture.

What is your diagnosis?

a. Parapsoriasis en plaques
b. Necrobiosis lipoidica
c. Pigmented purpuric dermatosis
d. Seborrheic dermatitis

Answer

Necrobiosis lipoidica (NL) **(answer b)** is a cutaneous disorder characterized by distinctive, yellow-brown or reddish-brown plaques with sharply defined and slightly elevated borders. The lesions evolve slowly, enlarge over a period of months, and persist for many years. NL originates as brownish-red or skin-coloured lesions, and they slowly evolve into well-defined, waxy plaques of variable size and colour. The border often retains a reddish-brown colour, whereas the depressed centre tends to acquire a yellow-orange hue. Over 80% of NL cases occur on the shins and approximately two-thirds of the cases occur in patients with diabetes or abnormal glucose tolerance. Cosmetic disfigurement is often the primary concern of the patient; however, the lesions may ulcerate, resulting in pain.

Local wound care is often sufficient for healing any ulcerations occurring within NL lesions. In terms of treating the lesions themselves, topical or intralesional corticosteroids are the mainstay in therapy.

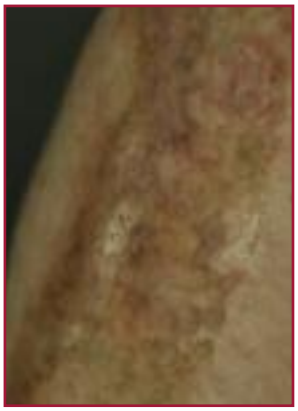

Figure 1: A Large Yellow-orange Plaque on the Right Shin of a 67-year-old Caucasian Female

Figure 2: A Large Yellow-orange Plaque on the Left Shin of a 67-year-old Caucasian Female

The etiology of NL is unknown; however, previous trauma to the area may be a predisposing factor in the initial development of the lesions. NL is more common in females than males and occurs most often in young adults, although it is not uncommon to find in children with juvenile diabetes.

Resources
1. Wolff K, Johnson RA: Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology. 6th ed. The McGraw-Hill Companies, Inc., New York, USA, 2009.
2. Lebwohl MG, Heymann WR, Berth-Jones J, *et al:* Treatment of Skin Disease: Comprehensive Therapeutic Strategies. Harcourt Publishers Limited, London, UK, 2002.

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Case 5

A Lump on the Scalp

A 90-year-old female was advised by her hairdresser to see her physician about a lump on her scalp. The patient says she has had this lump for as long as she can remember, and it never caused any problems. She is in good health for her age, and she is on warfarin for chronic atrial fibrillation.

What is your diagnosis?

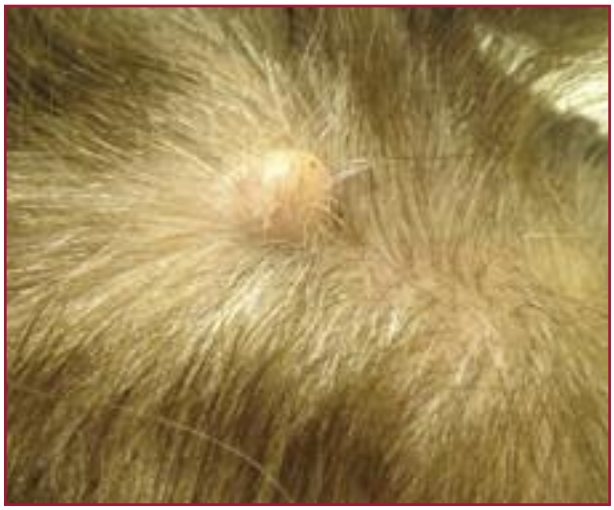
a. Epidermoid cyst
b. Cylindroma
c. Trichilemmoma
d. Lipoma

An epidermoid cyst (sebaceous cyst, epidermoid inclusion cyst) **(answer a)** is a smooth, dome-shaped swelling that occurs predominantly on the face, neck, scalp, and upper trunk from damage to the pilosebaceous units. A punctum is usually present.

Histologically, the cysts are lined by an epidermis-like epithelium, including a granular cell layer. The cysts contain laminated keratin.

Etiology

- Damage to the pilosebaceous units can cause these cysts
- Epidermoid inclusion cysts may also complicate penetrating trauma to the skin, such as by a sewing needle, which can result in the implantation of squamous epithelium in the dermis.



Treatment

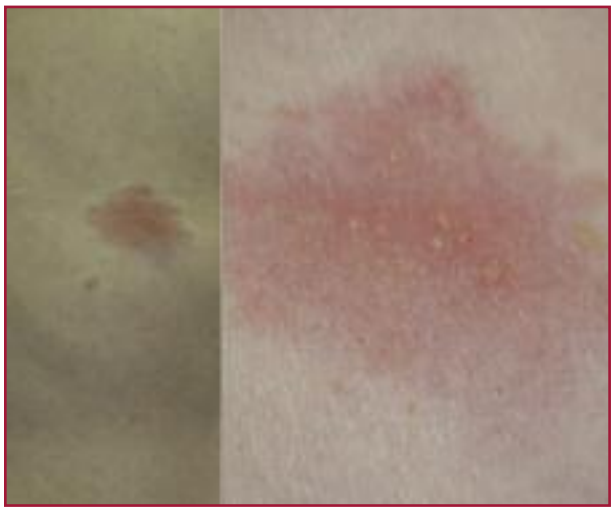
- Surgical excision with narrow margins

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 General Practitioner in Mississauga, Ontario.

Case 6

Painful Vesicles

A 65-year-old female presents with multiple monomorphic vesicles in a linear distribution on an erythematous patch on the left side of her back and under her left breast. She also complains of back pain in the affected area.



What is your diagnosis?

a. Photoallergic contact dermatitis (poison ivy)
b. Necrotizing fasciitis
c. Bullous impetigo
d. Herpes zoster (varicella-zoster virus infection)

Answer

Herpes zoster **(answer d)**, also commonly referred to in lay terms as "shingles," is due to reactivation of latent varicella-zoster virus (VZV) in either a spinal or cranial sensory ganglion. Primary VZV, or chickenpox, usually occurs in childhood. Dormant VZV is present in the sensory ganglia of most adults in Canada, and it can become reactivated in normal hosts and immunocompromised patients and spread from the ganglion, along the nerve, to the skin.

VZV infections commonly occur on the thoracolumbar and facial dermatomes, and symptoms can include skin hypersensitivity, neuritic pain initially followed by vesiculation, and crusting. Since the virus is usually reactivated from a single sensory ganglion, the lesions are restricted to the corresponding unilateral dermatome. It is also common for the lesions to leave scarring after healing, and patients may have persistent pain or neuritis.

Diagnosis is made on clinical evaluation alone, but it can be confirmed by Tzanck smear, immunofluorescence, viral culture, or polymerase chain reaction. Immunization is now available for populations not previously exposed to VZV and with declining VZV-specific immunity. VZV infections can be managed by antiviral therapy, such as oral acyclovir 800 mg (three times daily for 7 to 10 days), valacyclovir 1,000 mg (three times daily for seven days), and famciclovir 500 mg (three times daily for seven days). All oral therapies should be initiated within 48 to 72 hours of the onset on vesiculation.

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