Editor's Picks "Best of 2011"

This month – 6 cases:

Case 1

Scaly Eruption on Scalp

This four-year-old boy has had a scaly eruption on his scalp for several months, which has gradually gotten worse, and it has now formed a boggy crust. No one else in the household is involved.

What is your diagnosis?

a. Psoriasis
b. Cradle cap
c. Tinea capitis
d. Crusted impetigo
e. Kerion

Answer

This youngster demonstrates an exaggerated response to a *Trichophyton Tonsurans* infection resulting in kerion formation **(answers c and e)**. Tinea capitis is most commonly seen in children. Scaling in the scalp, with broken hairs and alopecia, is most often noted. However, in some individuals there is a marked host immune response to the organism, resulting in thick plaques with pustules and/or abscesses, which can result in permanent hair root destruction. As the condition can lead to permanent baldness. It is, therefore, important to initiate treatment as soon as possible.

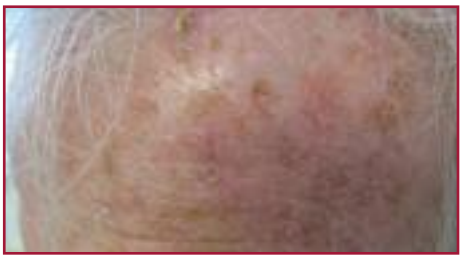
While topicals may be tried, some cases of tinea capitis invariably require oral terbinafine. Selenium sulphide or ketoconazole shampoos can be used to reduce infectivity and should also be used.

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

Case 2

Rough, Scaly Papules on Scalp

A 77-year-old male presents with numerous rough, red scaly papules on his scalp. He used to work as a lifeguard and he has served in the marines.



What is your diagnosis?

a. Basal cell carcinoma
b. Squamous cell carcinoma
c. Seborrheic keratoses
d. Actinic keratoses
e. Dermatoheliosis

Answer

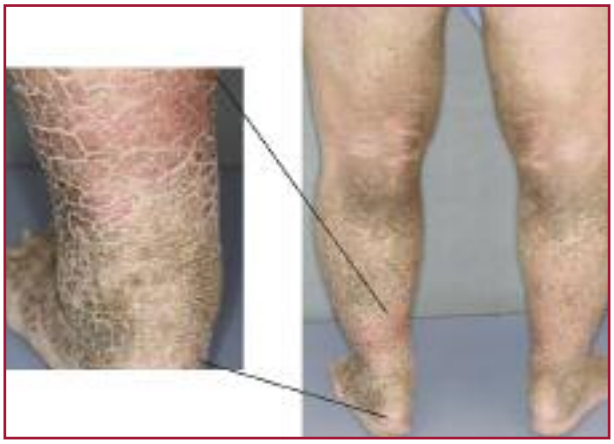
Actinic keratoses **(answer d)** are the most common premalignant skin lesions, and they present as discrete, scaly, red, rough, papules measuring a few millimeters. They typically present on the face, dorsal hands, and forearms and less commonly on the legs. Individual lesions are typically managed with liquid nitrogen cryotherapy. Other treatment options, especially when numerous lesions are present, include topical 5-fluorouracil and topical imiquimod, and less commonly, chemical peels. Thicker lesions should be curetted or excised. Biopsy of hypertrophic lesions or those not responding to the aforementioned treatments should be performed to rule out invasive squamous cell carcinoma.

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

Case 3

Fish-like Scales

A sixty-year-old male presents with dry, thickened, scaly skin covering his anterior thighs, calves, and abdomen. The lesions have been present for forty years, and there is no family history of a similar condition.



What is your diagnosis?

a. Ichthyosis
b. Xerosis
c. Psoriasis
d. Atopic dermatitis

Answer

Ichthyosis **(answer a)**, derived from the Greek word ichthys meaning "fish," belongs to a group of acquired or inherited disorders that are characterized by abnormal differentiation of the epidermis and are distinguished clinically by plate-like scaling. Four main clinical forms of inherited ichthyoses exist: ichthyosis vulgaris, X-linked ichthyosis, autosomal recessive ichthyosis, and lamellar ichthyosis.

Ichthyosis vulgaris is the most common form of ichthyosis. It is relatively mild and is inherited in an autosomal dominant fashion. This condition most prominently affects the extensor surfaces of the extremities and appears as thick, white, plate-like scales over large areas. Superficial fissuring through the stratum corneum causes "cracking" to occur at the edges of the scale. Ichthyosis vulgaris is commonly observed in association with hyperlinear palms, keratosis pilaris, and atopy.

The management of ichthyoses focuses primarily on the hydration, lubrication (lotions, creams, ointments, oils, or petrolatum), and keratolysis (creams and lotions containing urea, salicylic acid, or hydroxy acids) of affected skin.

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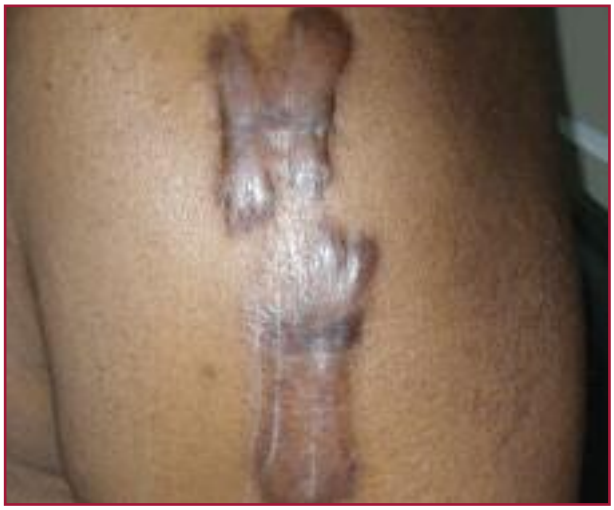
Case 4

Hyperpigmented Linear Lesions

A 41-year-old male presents with three linear, raised, hyperpigmented lesions on his left shoulder. He has a remote history of trauma to this area.



What is your diagnosis?

a. Hypertrophic scar
b. Keloid scar
c. Lobomycosis
d. Dermatofibroma

Answer

The diagnosis is a keloid scar **(answer b)**. A scar resulting from surgery, trauma, or even cystic acne may become unusually large in a susceptible patient. If the margins stay within the original trauma site, it is called a hypertrophic scar; this usually develops within four weeks of the injury. If the borders grow beyond the original lesion margins, it is known as a keloid scar, often appearing months to years after the incident. Unlike a hypertrophic scar, a keloid is histologically different, demonstrating large collagen bundle deposition. Keloids are often painful or sensitive in the early stages of development. They are most commonly seen on the shoulders and chest but can appear anywhere on the body. Individuals with dark pigmented skin are more susceptible to developing these lesions.

Although a hypertrophic scar may regress on its own, a keloid scar very rarely does so. The first line of treatment for a keloid scar is intralesional steroid injection with 40 mg/ml triamcinolone acetonide every two to four weeks. When the lesion flattens, the concentration and frequency of injections should be reduced to prevent involution of skin and telangiectasia. Other treatments include cryotherapy, surgical excision followed by intralesional steroid, silicone gel sheeting and intralesional 5-Fluorouracil injection.

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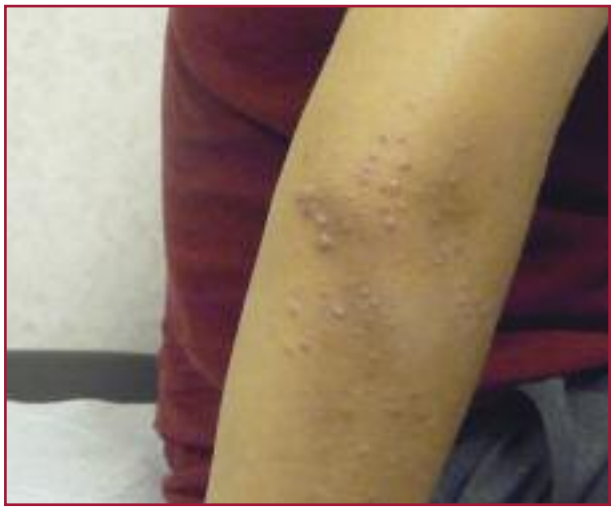
Case 5

Nonpruritic Skin-coloured Papules

A 12-year-old boy presents with nonpruritic skin-coloured papules on the elbows and extensor surfaces of both forearms. These lesions have been present for six months. The patient used to participate in a lot of outdoor sports. His past history is significant for atopic dermatitis. Viral studies are negative. The lesions respond to treatment with a mild corticosteroid cream and do not recur after cessation of treatment.



What is your diagnosis?

a. Molluscum contagiosum
b. Gianotti-Crosti syndrome
c. Dermatitis papulosa juvenilis
d. Papular urticaria

Answer

Dermatitis papulosa juvenilis **(answer c)**, also known as frictional lichenoid eruption, typically presents as lichenoid, reddish or skin-coloured papules, mainly seen on the elbows and knees. It is also not uncommonly found on the extensor surfaces of the forearms. The papules have regular borders, are 1 to 2 mm in diameter, and sometimes aggregate into plaques. Inquiry may reveal contact with irritant or abrasive materials, such as sand, grass, or wool blankets. A history of atopy can be elicited in 15 to 50% of cases. Treatment consists of topical application of a mild corticosteroid.

Gianotti-Crosti syndrome is characterized by an acute onset of a papular or papulovesicular eruption with a symmetrical distribution. The eruption is found predominantly on the cheeks, extensor surfaces of the extremities, and buttocks. Epstein-Barr virus is the most common pathogen associated with Gianotti-Crosti syndrome and other viral infections (hepatitis B virus mainly in Europe). The eruption usually lasts 10 days to several weeks.

Molluscum contagiosum is caused by a pox virus of the molluscipox genus. Typically, molluscum contagiosum presents as discrete, smooth, flesh-coloured papules with central umbilication from which a plug of cheesy material can be seen.

Papular urticaria is intensively pruritic and is caused by hypersensitivity to insect bites. Lesions initially appear as wheals and progress to papules.

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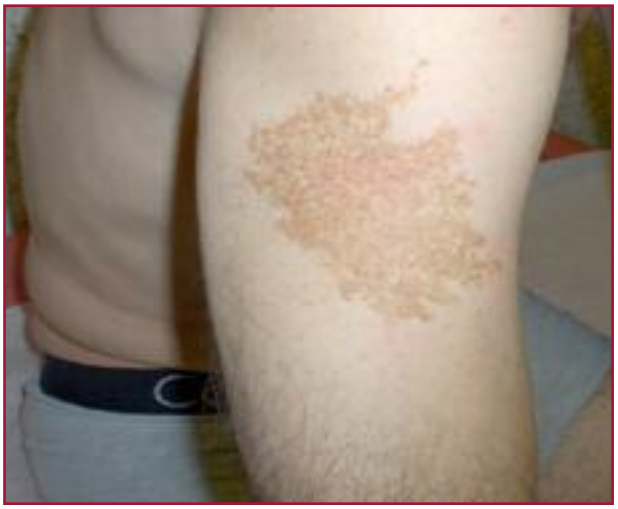
Case 6

Pigmented Lesion on Upper Arm

This gentleman has had this lesion since birth. It has increased in size as he has gotten older. He is not bothered by it at all.



What is your diagnosis?

a. Congenital nevomelanocytic nevus
b. Pigmented epidermal nevus
c. Dysplastic Melanocytic nevus
d. Café-au-lait macule

Answer

Congenital nevomelanocytic nevus (CNN) **(answer a)** is a pigmented lesion of the skin, usually present at birth. Rare varieties of CNN can develop and become clinically apparent during infancy. CNN may be of any size, from very small to very large. CNN are benign neoplasms composed of cells called nevomelanocytes, which are derived from melanoblasts. All CNN, regardless of size, may be precursors of malignant melanoma.

The prevalence of CNN is equal in both males and females, and it is present in 1% of Caucasian new-borns, the majority are less than 3 cm in diameter.

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.