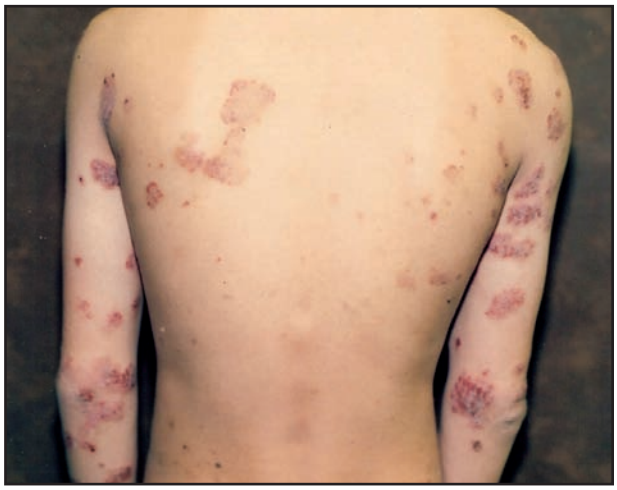
This month–9 cases:

Case 1

Red, Weeping and Oozing

A 12-year-old boy presents with a generalized, itchy rash over his body. The rash has been present for two years. Initially, the lesions were red, weeping and oozing. In the past year, the lesions became thickened, dry and scaly.



What is your diagnosis?

a. Psoriasis
b. Pityriasis rosea
c. Seborrheic dermatitis
d. Atopic dermatitis (eczema)

Answer

Atopic dermatitis (eczema) **(answer d)** is a chronically relapsing dermatosis characterized by pruritus, erythema, vesiculation, papulation, oozing, crusting, scaling and, in chronic cases, lichenification. Associated findings can include xerosis, hyperlinearity of the palms, double skin creases under the lower eyelids (Dennie-Morgan folds), keratosis pilaris and pityriasis alba.

Psoriasis is characterized by sharply demarcated erythematous plaques with adherent silvery micaceous scales. Removal of the scales results in punctate bleeding (Auspitz sign). Pityriasis rosea is characterized by a herald patch, followed five days to 10 days later by a widespread, symmetrical eruption in which the long axes of the rash extend along skin tension lines and give rise to a "Christmas tree" appearance. Seborrheic dermatitis is characterized by a greasy, scaly, non-itchy, erythematous rash, which might be patchy and focal and might spread to involve the entire body.

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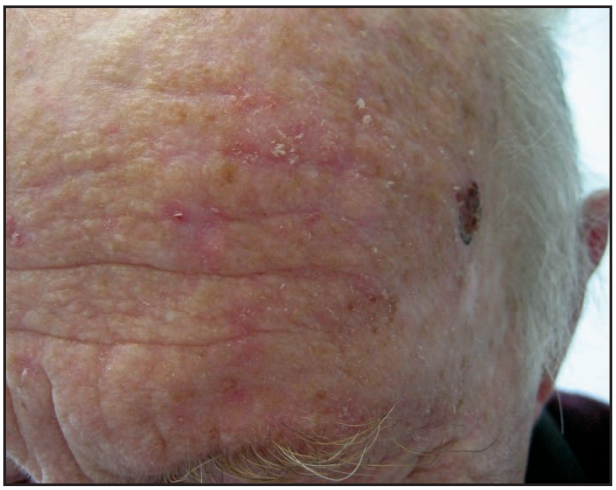
Case 2

A Rough Forehead

A 74-year-old male presents with asymptomatic red, scaly and rough papules on the left of his forehead, which have been present for the past several months. He has a history of squamous cell carcinoma of the scalp.



What is your diagnosis?

a. Basal cell carcinoma
b. Squamous cell carcinoma
c. Actinic keratoses
d. Seborrheic dermatitis
c. Allergic contact dermatitis

Answer

Actinic keratoses **(answer c)** are the most common premalignant skin lesions which present as discrete scaly, red and rough papules measuring several millimeters. They typically present on the:

- face,
- dorsal hands,
- forearms and, less commonly, on the legs.

They are typically managed with liquid nitrogen cryotherapy. Other treatment options include chemical peels, curettage, topical 5-fluorouracil, topical imiquimod and less commonly, topical diclofenac. Biopsy of hypertrophic lesions or those not responding to the aforementioned treatments should be performed to rule out invasive squamous cell carcinoma.

The skin lesions typically present on the face, dorsal hands and forearms and less commonly, on the legs.

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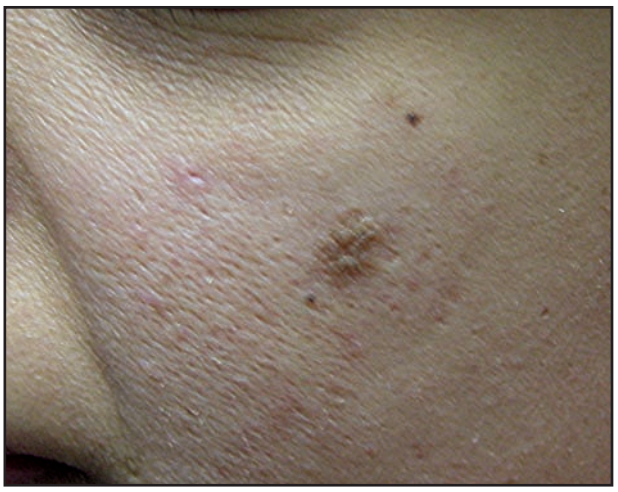
Case 3

A Flat Papule

A 35-year-old woman presents with a slow-growing, tan-coloured, flat papule on her cheek.



What is your diagnosis?

a. Lichen planus
b. Seborrheic keratosis
c. Small papular acne
d. Flat wart
e. Epidermal nevus

Answer

This patient has a flat wart **(answer d)**. Flat warts are tan, skin or reddish in colour with soft, smooth surfaces that are slightly elevated and flat-topped, forming 1 mm to 3 mm discrete papules. Common sites of infection include the neck, face, dorsal hands and extensors of the forearms.

There are two types of treatments: destructive therapy (i.e., cryotherapy), or immunotherapy. Our patient was treated with topical imiquimod b.i.d. treatment for up to 24 weeks.

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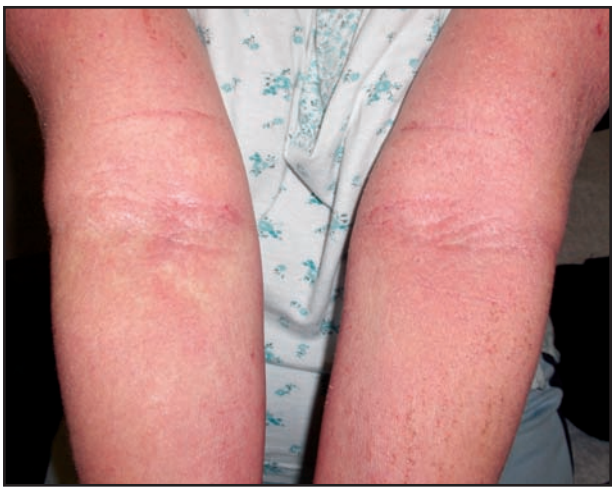
Flat warts are tan, skin or reddish in colour with soft, smooth surfaces that are slightly elevated and flat-topped.

Case 4

Itchy Arms

This 46-year-old woman presents with a severe itching sensation on her arms. Her history is unremarkable apart from suffering from allergic rhinitis. Her mother suffered from severe asthma.



What is your diagnosis?

a. Contact eczema
b. Seborrheic dermatitis
c. Neurodermatitis
d. Atopic dermatitis
e. Dermatophyte infection

Answer

The hallmark of atopic dermatitis (AD) **(answer d)** is itching, which can be severe. AD is characterized by redness, scaling and lichenification. In adults, it most commonly occurs in the antecubital fossae and popliteal fossae, as well as on the nape of the neck. Because there is no true primary lesion, patients with AD often present solely with itching or "sensitive skin". As the skin is scratched or rubbed to obtain relief, it may show excoriations, vesiculation and crusting. Secondary bacterial infection of the skin is common.

Seborrheic dermatitis is usually limited to the scalp, glabella, and paranasal area. Contact dermatitis, especially when it is on the hands, can mimic AD. The history helps in achieving a diagnosis. Neurodermatitis has a similar morphology and has a sometimes more varied distribution, but the distinguishing feature is the lack of atopic history.

The most important aspect of therapy is to "put the skin to rest" by avoiding irritants. Soap should be limited to the critical areas such as the hands, face, axillae and groin. Excessively hot water is also destructive to the skin. Patients will want to bathe daily, but extensive soaking may aggravate their skin. Short, lukewarm showers are acceptable.

Topical corticosteroids are needed for long periods of time. Therefore, high-potent and super-potent ointments or creams should be limited to flares and medium-potent or low-potent agents should be used for maintenance.

Patients should be encouraged to use unscented moisturizers. Creams or ointments are more effective than lotions and should be applied immediately after showering to limit irritation and drying, which inevitably results from soap and water. This is especially important in winter.

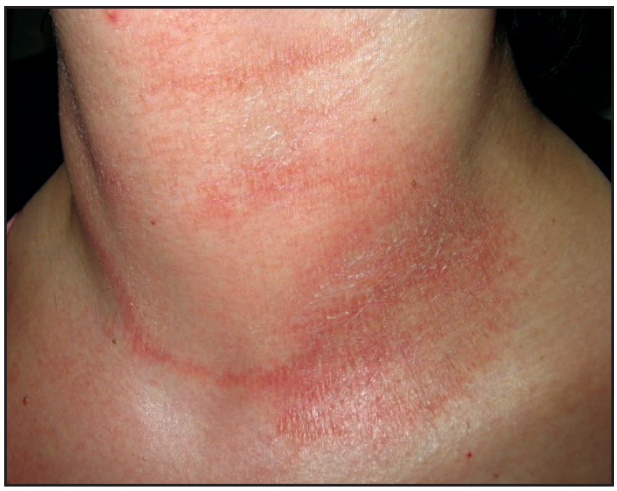
Remember that the sensitivity to wool of patients with AD carries over into lanolin-based products.

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, Mississauga, Ontario.

Case 5

A Patchy Neck

A 29-year-old female presents with a several-day history of pruritic erythematous patches on her anterior neck.



What is your diagnosis?

a. Psoriasis
b. Seborrheic dermatitis
c. Allergic contact dermatitis
d. Discoid lupus erythematosus
e. Fixed drug eruption

Answer

Allergic contact dermatitis (ACD) occurs in individuals that have been previously sensitized to any of > 3,000 chemicals and is more likely in genetically predisposed individuals. A reaction typically develops within 24 hours to 48 hours of a subsequent exposure, although it can occur up to seven days later and typically resolves after two weeks to three weeks. Common causes of ACD include:

- nickel,
- fragrances,
- preservatives,
- black hair dye,
- topical medications (*e.g.,* neomycin, bacitracin),
- latex,
- rhus,
- cobalt,
- chromate,
- epoxy resin,
- rubber accelerators,
- rosin, *etc.*

Patients complain of significant pruritus and may have mild burning or discomfort. Lesions are edematous, erythematous and well-demarcated. Potent topical steroids are used and occasionally prednisone is necessary for generalized involvement. Cool saline compresses, sedating antihistamines to aid in sleep and newer topical immunomodulators are adjunctive measures.

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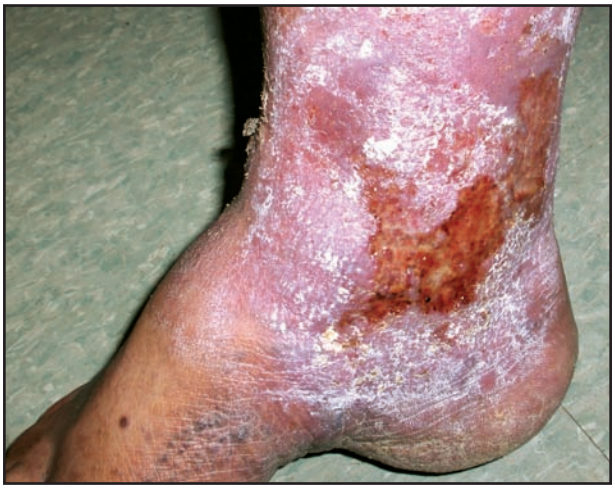
Case 6

A Chronic Condition

A 56-year-old gentleman was sent by the home care nurse who was concerned about the non-healing ulcer on his leg, which he has had for the last two months that seems to be getting worse.

He is overweight and six years ago was diagnosed to have diabetes. His diabetes are reasonably controlled by metformin and gliclazide. He smoked 20 cigarettes to 30 cigarettes a day for the last 30 years. He now works from home and is not very active.

Previously, he had a high tie and multiple avulsions for severe bilateral varicose veins which have since recurred.



What is your diagnosis?

a. Arterial ulcer (Ischemic ulcer)
b. Venous ulcer (Stasis ulcer)
c. Squamous cell carcinoma
d. Traumatic ulcer
e. Basal cell carcinoma

Answer

Venous ulcers **(answer b)**, are more common in women; patients are usually middle-aged or older, often with a history of thrombophlebitis. Although pain and tenderness associated with venous ulcers may be pronounced, symptoms are usually less prominent than one might expect from the clinical appearance.

Venous ulcers often follow a minor injury. They are usually unilateral, involving the lower third of the leg and ankle, especially the malleoli. Borders are sharp and often irregular. The surrounding skin may be thickened, hyperpigmented and pebbly. Chronic lymphedema is also often present. The base of the ulcer, which bleeds easily when disturbed, is made up of granulation tissue and necrotic slough in varying proportions.

Treatments of venous ulcers are largely strategies for improving venous return:

- leg elevation,
- elastic stockings,
- bandages and
- surgical intervention (ligation and stripping procedures).

Grafting is sometimes feasible. Eczematous eruptions (stasis dermatitis) usually improve with medium-high or super-potent topical corticosteroids.

Venous ulcers tend to be chronic. Compliance with therapy and preventive measures can significantly improve prognosis.

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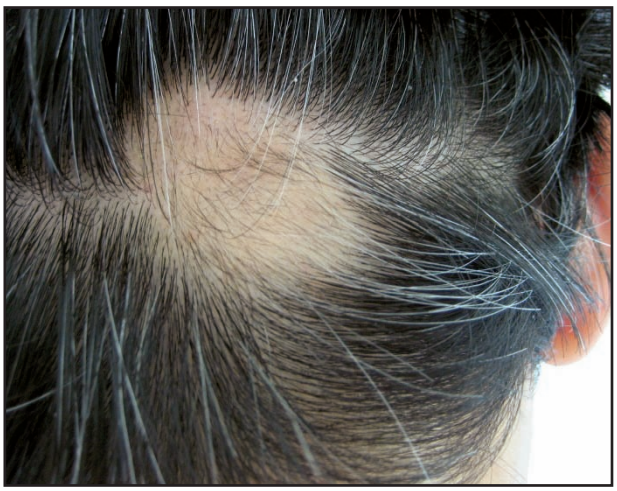
Case 7

"Why am I losing hair?"

A 51-year-old female is concerned about the round area of hair loss on her occipital scalp, which is now starting to regrow.



What is the diagnosis?

a. Alopecia secondary iron-deficiency
b. Androgenetic alopecia
c. Trichotillomania
d. Telogen effluvium
e. Alopecia areata

Answer

Alopecia areata (AA) **(answer e)** is a non-scarring autoimmune condition which most commonly presents in young adulthood. AA presents as oval, well-defined patches with exclamation hairs at the periphery. Entire scalp involvement is termed alopecia totalis, while hair loss affecting the entire body is termed alopecia universalis. The differential diagnosis should include non-scarring alopecias such as telogen effluvium and androgenetic alopecia, and also tinea capitis. Other autoimmune conditions that have been associated with AA are:

- atopic dermatitis,
- vitiligo,
- thyroid disease and
- pernicious anemia.

The treatment of choice is an intralesional triancinolone topical injected every 1 cm on the affected areas every four weeks to six weeks. Potent topical steroids are also used, as well as minoxidil, anthralin and contact sensitizers such as diphencyclopropenone.

Alopecia areata presents as oval, well-defined patches with exclamation hairs at the periphery.

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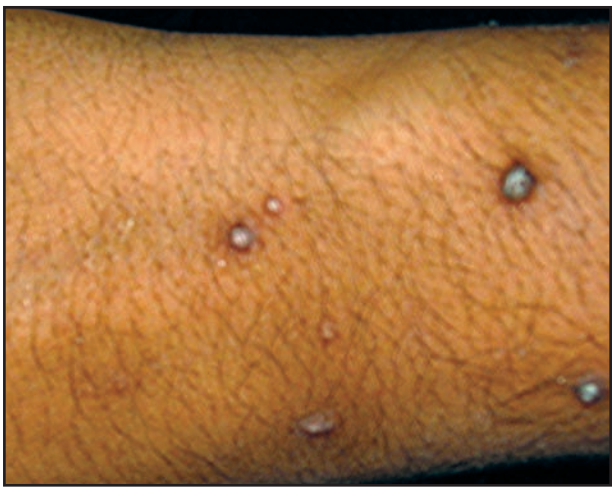
Case 8

Bothersome Bites

This healthy 15-year-old male returns from a camping trip with multiple itchy insect bites. The lesions and the pruritis persisted with the development of multiple, firm, brownish nodules on the forearms.



What is your diagnosis?

a. Dermatofibromas
b. Prurigo nodularis
c. Neurofibromas
d. Foreign body granuloma
e. Insect bites

Answer

This patient has prurigo nodularis **(answer b)**. Prurigo nodularis refers to very itchy nodules often on the extremities. Lesions are typically at least half a centimetre in diameter, firm nodules and can be red-to-brown in colour. Severe pruritis from the underlying cause leads to excessive scratching that damages the skin with bleeding and scarring. Possible causes include:

- insect bites,
- atopic dermatitis,
- hepatic disease,
- anemia and
- stress.

Treatment is often difficult. Somewhat helpful treatments consist of symptomatic measures which include:

- antipruritic lotions,
- antihistamines and
- emollients (are often helpful).

Topical or intralesional steriods are other options.

Lesions are typically at least half a centimetre, firm nodules and can be red to brown.

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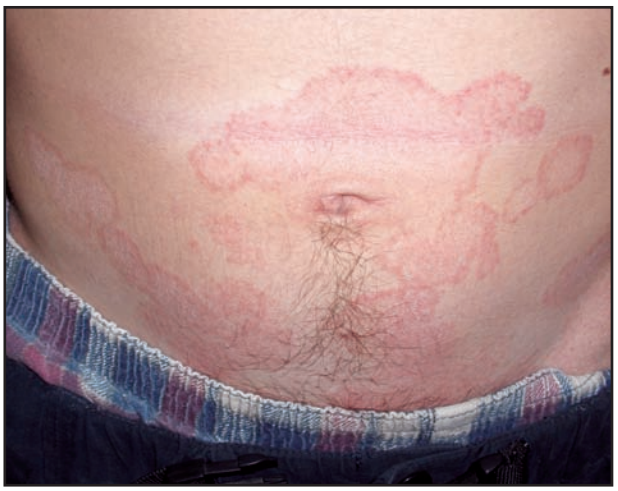
Case 9

Ring-like Rashes

This gentleman presents with a ring-like skin rash.



What is your diagnosis?

a. Tinea versicolor
b. Contact dermatitis
c. Atopic dermatitis
d. Tinea corporis
e. Psoriasis

Answer

Tinea corporis **(answer d)** is a superficial fungal infection, which may be asymptomatic, pruritic, or burning. It is often referred to as ringworm because the characteristic lesion is a round, scaling, red area with central clearing and sharp elevated borders. Most dermatophyte infections are caused by species of *Trichophyton*, *Epidermophyton*, or *Micosporum*.

Clinical inspection is generally sufficient to make the diagnosis, but 10% potassium hydroxide scrapings showing branching hyphae or positive fungal cultures confirm the clinical impression.

Fungal infections of the skin itself can be treated with topical antifungal creams of the imidazole or allylamines classes. With more extensive or chronic involvement, oral agents such as 250 mg terbinafine are taken q.d. for three weeks to four weeks.

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