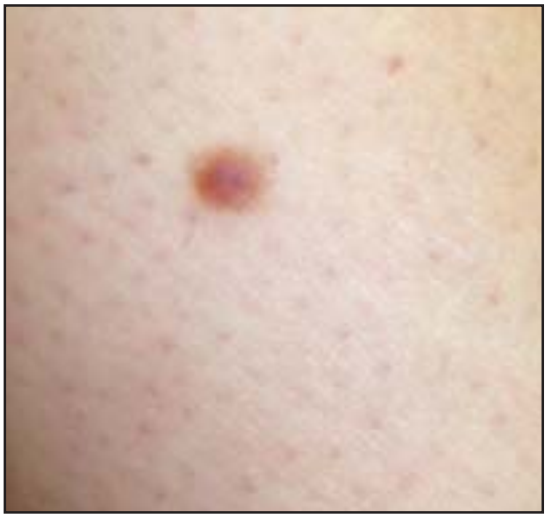
Case 1

"What's this bump?"

A 25-year-old woman is concerned with a firm, pigmented lesion of her left thigh.



What is your diagnosis?

a. In-grown hair
b. Melanoma
c. Dermatofibroma
d. Sebaceous cyst
e. Dermal nevus

Answer

Dermatofibromas (**Answer c**) are common benign fibrohistiocytic tumours of the skin. They favour the lower extremities and deltoid region primarily in adults. They are usually < 10 mm in size and are hyperpigmented, but may be pink or tan in colour.

The lesions may be tender and pinching, reveals their deep dermal to subcutaneous character. While with time they may regress, these lesions may also persist—especially centrally.

They may be flattened with liquid nitrogen or totally excised, but the resultant scar may appear worse than the lesion.

Stanley Wine, MD, FRCPC, is a dermatologist, Toronto, Ontario.

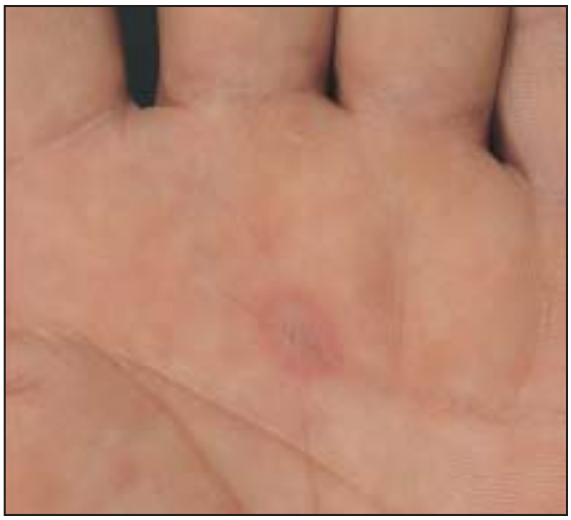
This month—7 cases:

1. *"What's this bump?"*
2. *"It's all over me!"*
3. *"I can't stand the itching!"*
4. *"Get this off my face!"*
5. *A mite's might*
6. *"Am I contagious?"*
7. *An eye for an eye*

Case 2

"It's all over me!"

A young man, 26, presents for the first time with characteristic lesions on his palms, knees and the dorsum of his feet. He is bothered by the itch. On examination, lesions are also noted on the buccal mucosa.



What do you suspect?

a. Erythema multiforme
b. Pemphigus vulgaris
c. Cicatricial pemphigoid
d. Stevens-Johnson syndrome
e. Eczema

Answer

This patient has *erythema multiforme* (**Answer a**). Although mainly a clinical diagnosis, histology can be useful in atypical cases to rule out other bullous diseases with oral involvement, for example **b and c**.

Erythema multiforme is defined by the presence of three-zone target lesions with acral distribution. The lesions can become very itchy, but fortunately, most resolve after 10 days.

The etiology of this disease is unkown, but 60% to 70% of cases are associated with herpes simplex virus (HSV)-1 and HSV-2 infections a couple of weeks prior to the development of skin lesions.

Other etiologic agents include mycoplasma pneumonia, streptococci and a variety of drugs. When there is extensive mucosal involvement (including conjunctiva and genetalia) it may be Stevens-Johnson syndrome.

Symptoms can be managed with oral antihistamines and mild to moderate potency topical steroids. If the patient has more than six attacks/year, long-term acyclovir may be used.

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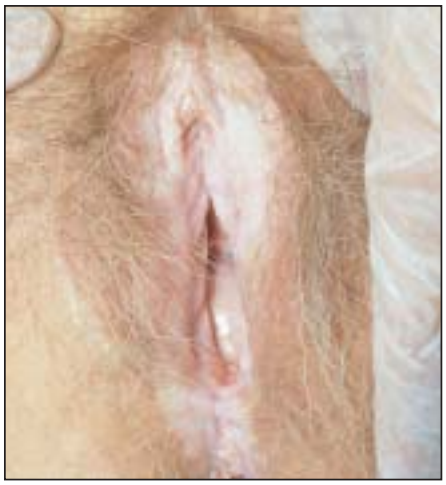
Case 3

"I can't stand the itching!"

A 57-year-old woman presents with intolerable itching and soreness on the vulva and perianal skin. White, symmetrical, atrophic papules and plaques with some follicular plugging are seen.



What is it?

a. Tinea
b. Candida
c. Psoriasis
d. Leukoplakia
e. Lichen sclerosus et atrophicus

Answer

This patient's vulvar lesion was diagnosed as *lichen sclerosus et atrophicus* (**Answer e**). This disease is a chronic atrophic disorder of the anogenital skin (85% to 98% of cases), and rarely the general skin of females and males. Lesions are commonly white, angular, well-defined, indurated papules and plaques with or without follicular keratotic plugs (dells). Associated symptoms include pain, dysuria, dyspareunia and intractable pruritis.

In children, lichen sclerosus often presents as itching, soreness or blisters; the condition resolves on its own at puberty. A biopsy may be important to rule out leukoplakia (epithelial dysplasia or carcinoma in situ).

Symptomatic treatment is aimed at relieving pruritis (use bland emollients, oral antihistamines, avoidance of local irritants and occlusive clothing) and relieving constipation or dyschezia (stool softeners).

Good initial therapies include very potent topical corticosteroids (be aware of steroid-induced atrophy) and oral antihistamines. Intralesional steroids and topical hormones (testosterone propionate, 2%) are also used.

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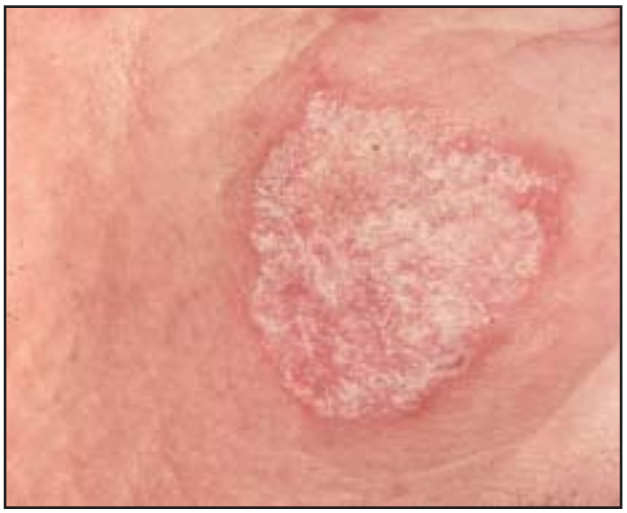
Case 4

"Get this off my face!"

A 72-year-old woman presents with a chronic erythematous lesion on her face that has a scaly surface. Some pigmentary changes are evident with some atrophy.



What is your diagnosis?

a. Psoriasis
b. Tinea
c. Discoid lupus erythematosus (DLE)
d. Lupus vulgaris
e. Lupus pernio

Answer

Lupus vulgaris is rarer than DLE and is a chronic tuberculous infection of the dermis diagnosed on biopsy. *Lupus pernio*, an uncommon skin manifestation of sarcoidosis, is a purple plaque mainly found on the cheeks and nose. Based on lesion characteristics, our patient is diagnosed as having DLE (**Answer c**).

Lesions are typically dull, red macules or patches with adherent scales. The patches tend to heal centrally with dyspigmentation, scarring, atrophy and telangiectasia. Lesions have a predilection for sun-exposed areas, including the scalp, bridge of the nose, malar areas, lower lip and ears. Although DLE is the most common form of chronic cutaneous lupus erythematosus, most patients do not have systemic involvement, as with our patient.

Patients should be educated regarding sun avoidance, the importance of daily sunscreen use (SPF > 30) and avoidance of excessive exposure to heat, cold and localized trauma. Topical corticosteroids and intralesional corticosteroids are also helpful.

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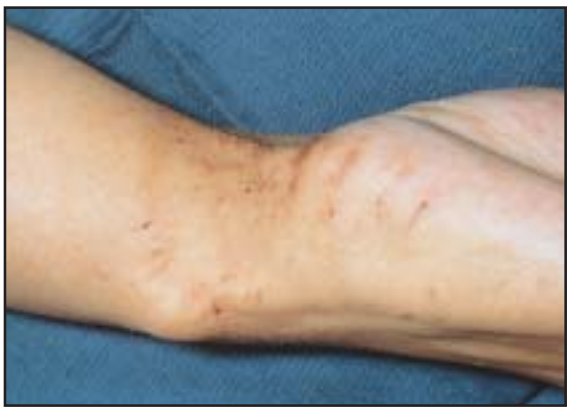
Case 5

A mite's might

A woman, 38, presents with multiple erythematous lesions on her wrists and trunk. She complains of intense itching at night and after a hot bath.



What is your diagnosis?

a. Atopic dermatitis
b. Scabies
c. Pyoderma
d. Dermatitis herpetiformis
e. Psoriasis

Answer

The patient also has lesions along the sides of the fingers, in the axilla and along the sides of the feet. These are typical locations of scabies lesions (**Answer b**). Burrows (wavy, greyish white papules, 1 to 10 mm long) are pathognomic and represent the tunnel dug by the female mite as she lays her eggs. Skin scrapings from the lesions can readily show the mites, *Sarcoptes scabiei*, under a light microscope. A biopsy is also useful.

The gold standard of treatment is a topical scabicide (permethrin, 5% cream) applied overnight to the entire body (especially warm, moist areas). Preventative measures are equally important. Linens, clothing and towels used in the past week by the patient should be washed in hot water. All individuals in close personal contact must be treated even if asymptomatic. Patients should be advised that lesions and pruritis may persist for two to four weeks after treatment and do not imply treatment failure.

Oral antihistamines or topical corticosteroids may be used to control the itching.

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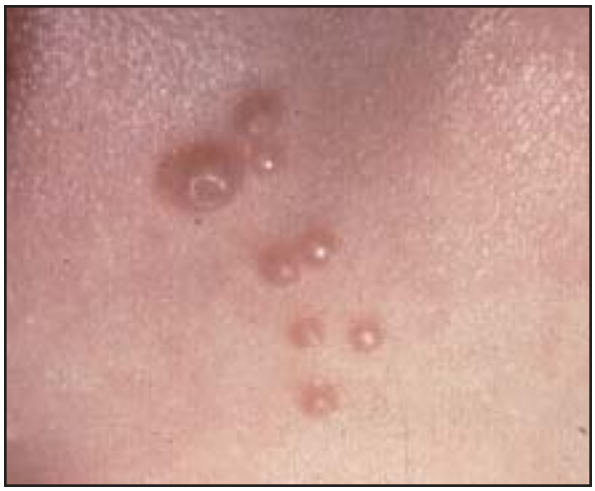
Case 6

"Am I contagious?"

A nine-year-old boy presents with several small, discrete, skin-coloured, dome-shaped, waxy papules. The lesions are asymptomatic.



What's going on?

a. Milia
b. Dermatofibroma
c. Cutaneous calculus
d. Common warts
e. Molluscum contagiosum

Answer

Common warts grow over several weeks to months from pinhead-sized, flesh-coloured translucent papules to larger, elevated, papillary-surfaced, often darker, hyperkeratotic papules. Black specks are thrombosed capillary loops.

This boy's legions are consistent with molluscum contagiosum (**Answer e**). Molluscum lesions are white or flesh-colored, waxy, discrete, umbilicated papules, 1 to 10 mm in size. Lesions result from a pox virus infection of the skin, sometimes also affecting the mucus membranes. It is a self-limiting disease that frequently resolves within eight months. Children and sexually active adults are most frequently affected.

Lesions are often found in clusters on the face, trunk, lower abdomen, pubis, penis and inner thighs. They may be especially large in immunosuppressed patients. Treatment indications are for prevention of spread to self and others (avoiding communal bathing, sharing of towels and skin-to-skin contact), as well as for cosmetic reasons.

Treatment options include manual extrusion of lesions using fine forceps, cryotherapy and topical imiquimod, 1% to 5% (applied three times/week for one to three months).

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Case 7

An eye for an eye

A four-year-old girl presents with a small, single, white patch around her eye that was not present at birth. The skin surface is normal.

What is your diagnosis?

a. Vitiligo
b. Pityriasis versicolor
c. Halo naevus
d. Pityriasis alba
e. Morphoea

Answer

This patient has *vitiligo* (**Answer a**). Vitiligo is a common acquired disease affecting 1% to 2% of the population (women more than men). Lesions are completely lacking melanin pigmentation and appear after birth. The hair in the lesions may also be depigmented with hyperpigmented skin surrounding the lesion. Underlying mechanisms include autoimmunity, neurohumoral factors and autocytotoxicity.

Vitiligo can be challenging to manage and there are various approaches to treatment. During treatment, affected areas must be covered from the sun due to photosensitivity. Self-tanning dyes and heavy coverup makeup may help cosmetically.

Treatment aims to suppress the autoimmune destruction of melanocytes. Topical corticosteroids (potent to very potent) and phototherapy are good initial approaches. Intralesional steroids (*e.g.*, triamcinolone acetonide) are also helpful. Topical immunomodulators (*e.g.*, tacrolimus, pimecrolimus) have been reported to be beneficial.

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