# DermCase

#### This month:

"My ear won't stop hurting!"

"What are these red bumps?"
"Why won't this rash leave?"

"What's the cause of this rash?"

. Cortisone Cream Didn't Help!

. "Can my girlfriend get it?"

"My wife noticed it!"

"My face!"

## Case 1

# "My ear won't stop hurting!"

For one week, a 35-year-old woman's left ear has been very painful, erythematous, and swollen. There is no history of insect bite or trauma. Her condition improved only slightly after the physician she initially consulted prescribed methylprednisolone and cephalexin.

### What do you suspect?

- a. Bacterial cellulitis
- b. Fungal cellulitis
- c. Relapsing polychondritis
- d. Insect bite reaction
- e. Chondrodermatitis nodularis chronica helicis

#### Answer

The patient has *relapsing polychondritis*, (**Answer c**), a diagnosis that is difficult to make without a biopsy. This condition is categorized by intermittent episodes of inflammation of cartilage that contains type II collagen, such as is found in the ears, trachea, and nose. Onset is typically in the fourth or fifth decade.



Bacterial cellulitis usually responds to cephalexin, and fungal cellulitis is uncommon in healthy persons. Chondrodermatitis nodularis chronica helicis is a painful papule found on the helical rim; it affects primarily middle-aged men.

# "What are these red bumps?"

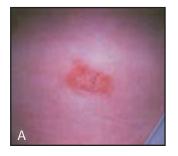
A 24-year-old woman seeks evaluation of a pruritic eruption of two weeks' duration on her trunk and proximal extremities. The eruption consists of numerous small red spots (Figures A and B) and a smaller number of larger, more erythematous lesions (Figures C and D). The patient takes an oral contraceptive and is in good health.

## What condition(s) are you looking at here?

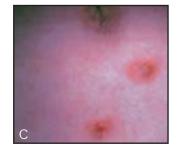
- a. Psoriasis
- b. Pityriasis rosea
- c. Urticaria
- d. Urticarial vasculitis
- e. Mycosis fungoides
- f. Pityriasis lichenoides chronica

#### Answer

The appearance and distribution of the small, oval, salmon-coloured macules on the patient's trunk point to the diagnosis of pityriasis rosea (Answer b). A tapering course of prednisone was prescribed for this patient. The smaller lesions resolved promptly, but the larger ones remained and were extremely pruritic. A biopsy revealed urticarial vasculitis (Answer d), a hypersensitivity response that appears as an exaggerated urticarial reaction that can last for months. The









lesions respond to dapsone therapy. The cause of urticarial vasculitits is usually unknown; however, in this patient, it may have been related to pityriasis rosea.

Psoriasis is charaterized by scaling. Urticaria tends to appear and subside; individual lesions usually last 24 hours or less. Mycosis fungoides and pityriasis lichenoides chronica are typically not highly pruritic; these conditions can be ruled out by biopsy.

# "Why won't this rash leave?"

A 44-year-old man complains of a pruritic groin rash of five months's duration. Application of betamethasone-clotrimazole cream for three weeks and a three-month course of oral terbinafine failed to resolve the rash. The patient is otherwise health and currently takes no medications.

### Do you recognize this rash?

- a. Tinea cruris
- b. Candidiasis
- c. Intertrigo
- d. Contact dermatitis
- e. Erythrasma

### What action would you take?

- f. Prescribe an oral imidazole antifungal
- g. Advise the patient to use a different laundry detergent and fabric softener
- h. Prescribe a topical imidazole or ciclopirox
- i. Advise the patient to apply a drying agent, such as talcum powder or aluminum acetate solution
- j. Prescribe a topical antibacterial agent, such as clindamycin

#### Answer

A potassium hydroxide evaluation confirmed the diagnosis of candidiasis, (Answer b). The betamethasone-clotrimazole combination has a significant failure rate against



fungal infection, and oral terbinafine is not significantly active against cutaneous yeast organisms. Better choices are imidazole of ciclopirox (**Answer h**).

Tinea curtis would have responded to the oral terbinafine. Contact dermatitis to elastic, detergents, or fabric softeners usually involves the areas where the underwear is tightest. Intertrigo and erythrasma does not respond to antifungal therapy.

# "What's the cause of this rash?"

For nine months, a 42-year-old man has had an itchy rash on one hand that features small vesicles on the edges of the fingers and on the palm. Results of an initial potassium hydroxide (KOH) evaluation are negative. The rash responded temporarily to topical corticosteroid creams, but then recurred.

### What is the likely cause?

- a. Dyshidrosis
- b. Atopic dermatitis
- c. Contact dermatitis
- d. Dermatophyte infection
- e. Psoriasis

#### Answer

A second KOH evaluation reveals a *dyshidrosi*form reaction to a dermatophyte infection (**Answer d**). Generally, unilateral involvement suggests a fungal infection.

Persons with atopy usually have a history of seasonal allergies or sensitive skin. The positive results of the second KOH evaluation ruled out contact dermatitis. Psoriasis is bilateral (unless there is a Koebner reaction) and involves nail pitting.





# Cortisone Cream Didn't Help!

A 35-year-old man complains of a mildly itchy rash on the dorsum of his right hand, which has been present for over a year. He has tried moisturizers and been prescribed cortisone creams, but neither helped.

### What is your diagnosis?

- a. Psoriasis
- b. Contact dermatitis
- c. Eczema
- d. A dermatophyte infection
- e. Granuloma annulare

#### Answer

Note the dusky erythema with the well-defined arcuate border and the fine scaling. This is characteristic of tinea manum (**Answer d**), which is most often caused by the dermatophyte Trichophyton rubrum. The clinical appearance and failure to respond to cortisone creams (which may aggravate it) is characteristic.

Many effective topical antifungals are available, including: ketoconazole, miconazole, econazole, terbinafine, ciclopirox, and tolnaftate. Treatment should be continued for four weeks to decrease the relapse rate. Definitive diagnosis may be made by taking superficial skin scrapings for potassium hydroxide and fungus culture. Examine the patient to see if other skin sites, such as the feet and crural area, are involved.



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# "Can my girlfriend get it?"

A healthy 17-year-old complains of a rash on his thighs and pubic area. It is itchy and irritating and alarmed his girlfriend.

### What would you suspect?

- a. Contact dermatitis
- b. Intertrigo
- c. Seborrhoeic dermatitis
- d. Tinea cruris
- e. Psoriasis

#### Answer

Note the arciform border and the bilateral symmetry. There is extension into the crural folds and up to the pubic area. Other areas of the skin did not show any evidence of psoriasis or seborrhoeic dermatitis. There were no satellite lesions or pustules to indicate intertrigo or folliculitis. Fungus scrapings showed mycelia with potassium hydroxide examination and the culture grew *Trichophyton rubrum*.

Tinea cruris (**Answer d**) is a common condition most frequently found in men and heavy individuals. It responds well to antifungals. It is not contagious unless a host is specifically susceptible to *T rubrum*. It is unlikely his girlfriend would get it.



# "My wife noticed it!"

A fit 62-year-old man had no complaints, but his wife was concerned after noticing a growth on his back.

### What is the growth?

- a. Tinea corporis
- b. Psoriasis
- c. Solar keratosis
- d. Dermatitis
- e. Superficial basal cell carcinoma
- f. Bowen's (squamous cell carcinoma in situ)

#### Answer

This psoriasiform, erythematous, scaly, slightly infiltrated plaque, with a fine thread-like pearly border, measured 1.50 cm. In retrospect, he noted the growth was occasionally irritating. Note the adjacent sun-damaged skin with variation in pigmentation.

This superficial basal cell carcinoma (Answer e) is most easily treated by electrodesiccation and curettage, which provides biopsy and treatment at the same visit. Excision is equally satisfactory, but often requires multiple visits and may leave a wider scar. The patient should be warned about sun protection and, as basal cells are often multiple, other areas of the skin should be examined.



If a lesion such as this does not clear with standard cortisone creams or antifungal therapy, a biopsy should be done.

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# "My face!"

A 32-year-old woman complained of unsightly lesions on her cheek and neck that have been growing for several months. The lesions have not responded to antifungals or cortisone cream. She had been under a lot of stress and was thought to be picking at the lesions.

### What caused this morphology?

- a. Discoid lupus erythematosus
- b. Granuloma annulare
- c. Excoriations
- d. Cutaneous sarcoid
- e. Psoriasis
- f. Tinea

#### Answer

The morphology revealed well-demarcated, annular, slightly infiltrated erythematous plaques with slight areas of atrophy. The diagnosis of cutaneous annular sarcoid was established by biopsy (**Answer d**). Fortunately, general examination, eye examination, and chest X-ray were normal. A biopsy should be performed if skin lesions are unidentified and not improving.



Sarcoid skin lesions often respond well to intralesional steroid injections of triamcinolone, 2.5 mg/mL. The course of sarcoidosis is capricious and variable. Continued surveillance is important.

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