# Dermatology:
# 10 Pearls of Wisdom

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This article aims to discuss dermatological problems commonly seen in the family practice setting and to improve clinical diagnoses and therapeutic intervention. Overall 15% to 30% of the problems that FPs face are dermatological in nature.



## *Onychomycosis*

Onychomycosis is a fungal infection of the nail bed, matrix or plate.[1] This condition is more common in male patients and in the elderly. In a sample of 15,000 patients, the following was noted:

- 16% had nail abnormalities
- 8.0% had mycologic evidence of toenail/fingernail onychomycosis
- 6.5% of the general population is thought to have onychomycosis

### *Treatment*

The therapeutic strategy should be guided by patient expectations (*i.e.*, cosmetic, medical and physical concerns). Depending on the degree of treatment motivation, different modalities of treatment can be employed, such as:

- mechanical thinning (by self or physician),
- topical antifungal treatment, or
- oral antifungal treatment.

There are several reasons for which to treat onychomycosis. These include:

- cosmetic consideration,
- psychological impact on patient,
- a decreased quality of life,
- nails are symptomatic (*i.e.*, pain on ambulation), or

### Owen's case

Owen, 68, presents with a crumbly toenail of 10 years duration. He is a diabetic and has poor circulation.

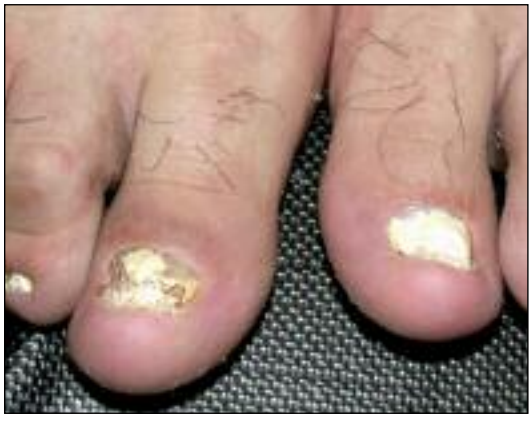

Photo courtesy of Dr. Scott Walsh, Division of Dermatology, University of Toronto, Ontario.

- nails become a reservoir for infections, which can then spread to other individuals or to other nails.

### *Remember...*

Always do nail clippings and beware of diseases which may mimic onychomycosis (*e.g.*, lichen planus and psoriasis).

## Paul's case

Paul, 28, presents with recurrent painful oral ulcers, which worsen with stress. He is otherwise healthy.

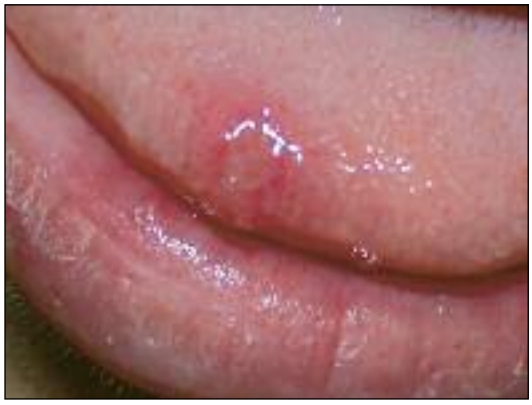

Photo courtesy of Dr. Scott Walsh, Division of Dermatology, University of Toronto, Ontario.

*Many cases of aphthous stomatitis are idiopathic in nature.*

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## *Aphthous stomatitis*

Aphthous stomatitis consists of sharply marginated oral ulcers which are recurrent and often idiopathic. However, it is important to rule out hematinic deficiencies (vitamins B1, B2, B6 and B12), zinc, folate and iron deficiencies, as well as HIV infection, inflammatory bowel disease and gluten sensitive enteropathy, as these may be the underlying cause of this condition.

### *Treatment*

Apthous stomatitis should be treated with:

- Topical lidocaine/anesthetic lotion
- Tetracycline suspension 250 mg/5 ml
- Topical steroid ointment
- Intralesional steroids
- Silver nitrate application
- Tacrolimus 0.1% ointment

Ask the patient to avoid nuts, chocolate and spices to rule out possible allergies.

### *Remember...*

Many cases of aphthous stomatitis are idiopathic in nature; however, aphthous ulcerations may be associated with a variety of diseases. Look for a possible underlying cause.

## *Perioral dermatitis*

Perioral dermatitis can present as inflammatory pustules. It commonly affects young adult females and children.

### *Treatment*

Begin treatment by discontinuing the use of topical steroids. Warn the patient that this discontinuation may result in a flaring of the condition.

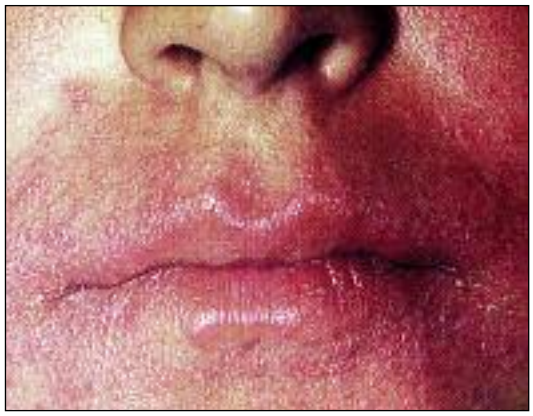
Antibiotic therapy consists of a four to six week course of either minocycline, erythromycin, topical metronidazole, or topical calcineurin inhibitors.

## *Remember...*

Limit the use of potent topical steroids on the face. Beware of a flare when discontinuing the inadvisable use of topical steroids.

## Riley's case

Riley, 35, presents with a 2-month history of an itchy rash around his mouth, to which he has persistently applied a topical corticosteroid. Initially, the cream helped, but each time he discontinues it, the rash recurres and is worse.



Photograph originally published in *The Canadian Journal of CME*, November 2004, Volume 16, Issue 11.

## *Fixed drug reactions*

A fixed drug reaction is likely when the eruption continues to recur on the same site and six to 48 hours post-drug ingestion. The blister is well-demarcated and heals with hyperpigmentation.

Drugs associated with fixed drug eruptions include:

- Phenolphthalein laxatives
- Sulfonamides
- Tetracycline
- Gold
- OCs
- Diazepam
- Codeine
- Acetylsalicylic acid

## Barry's case

Barry complains of a recurrent burning eruption on his penis. He develops a single blister on the glans penis that heals over 1 to 2 weeks with hyperpigmentation. This same pattern has happened on 3 occasions over the last 2 years.

Photo courtesy of Dr. Scott Walsh, Division of Dermatology, University of Toronto, Ontario.

### *Treatment*

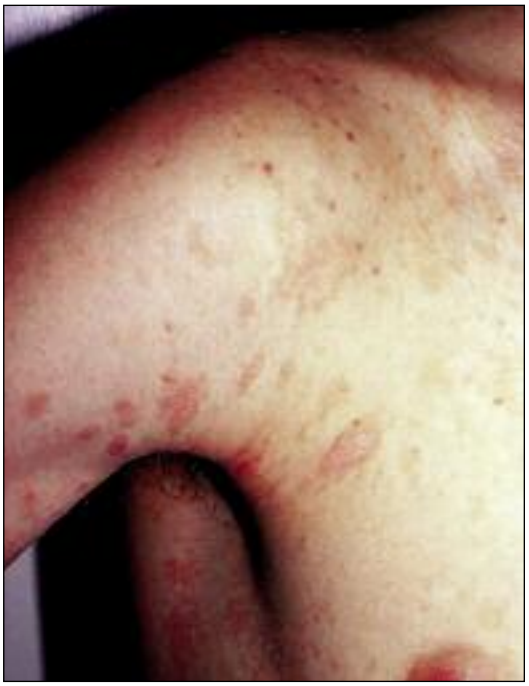
Discontinue the causative drug. Symptomatic treatment consists of normal saline soaks and topical steroids.

### *Remember...*

Consider drugs as a possible etiology. Diseases of the penis are not necessarily herpes simplex.

## Timothy's case

Timothy, 21, presents with a widespread, fine, papulosquamous eruption on his torso, in a Christmas tree pattern. The eruption is itchy. He does not have palmar lesions.



Photograph originally published in *The Canadian Journal of CME*, September 2004, Volume 16, Issue 8.

## *Pityriasis rosea*

Pityriasis rosea is a disease which is commonly papulosquamous in nature and has a predilection for the trunk. Often, the first lesion is larger, referred to as the "herald patch" (found in 80% of pityriasis rosea cases) as it heralds the oncoming eruption of pityriasis rosea. Pityriasis rosea can be asymptomatic or itchy. It is thought to be a reactivation of herpesvirus-6 and herpesvirus-7.

### *Treatment*

Treatment involves observation, reassurance and, in some cases, the use of:

- topical steroids,
- oral antihistamines,
- oral prednisone and antivirals, as well as
- ultraviolet B treatments.

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### *Remember...*

Secondary syphilis can present with a non-pruritic papulosquamous eruption similar to pityriasis rosea, but usually also has palmar lesions. A venereal disease research laboratory (VDRL) test is important to exclude secondary syphilis.

## *Molluscum contagiosum*

Molluscum contagiosum consists of pearly-white, dome-shaped, umbilicated papules, usually < 1 cm in diameter. They can be localized or very widespread. This condition affects all ages, but tends to be a very common condition in children. Molluscum contagiosum is not sexually transmitted in children, unlike in adults, where it can occur on the genitalia.

### *Treatment*

The treatment of molluscum begins with either:

- Manual extrusion
- Topical cantharidin
- Topical podophyllotoxin
- Topical imiquimod
- Cryotherapy (not often used in children)
- Curettage (post-lidocaine and prilocaine application)
- Topical retinoids

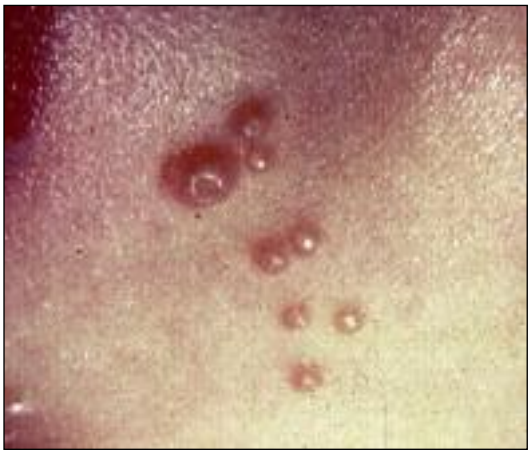
## *Remember...*

"Watching and waiting" can often be an option; however, patients and, in particular, their parents, often wish treatment. A number of modalities are useful. One tries to use modalities that do not cause the child to cry.

Molluscum contagiosum, as the name suggests, are contagious and can be easily passed from child-to-child.

### Mariyah's case

Mariyah, 4, presents with multiple asymptomatic molluscum over her torso and limbs. Her mother wishes them to be cured immediately.

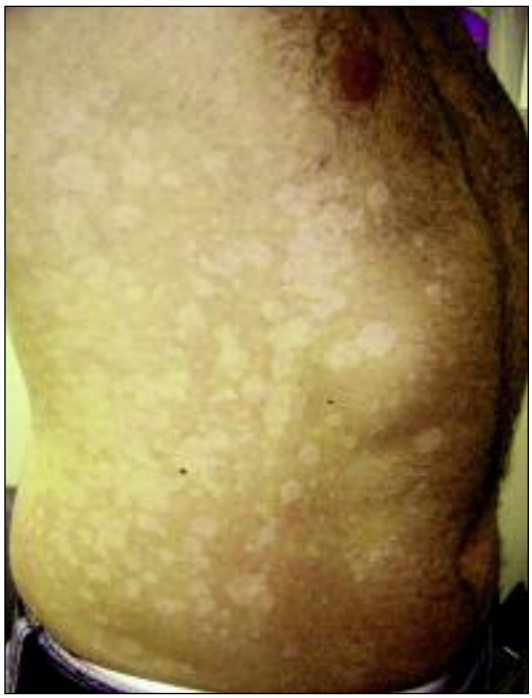


Photograph originally published in *The Canadian Journal of CME*, December 2004, Volume 16, Issue 12.

*Molluscum contagiosum is not sexually transmitted in children, unlike in adults, where it can occur on the genitalia.*

## Maury's case

Marury, 25, returns from a trip to the Dominican Republic with what he describes as a "terrible tan." He has multiple hypopigmented areas over his upper back and torso with a fine scale.



Photograph originally published in *The Canadian Journal of CME*, November 2005, Volume 17, Issue 11.

## *Pityriasis versicolour*

Pityriasis versicolour is an infection of the skin caused by a yeast normally found on the skin called *Malassezia*. It has an affinity for sebaceous glands as it needs fatty acids to survive. Pityriasis versicolour is common after puberty, due to increased secretions from the sebaceous glands. It typically presents with hypopigmented or hyperpigmented scaling plaques, generally on the back, trunk, scalp and upper arms.

*Pityriasis versicolour is an infection of the skin caused by a yeast normally found on the skin called* Malassezia.

### *Treatment*

Various topical measures include:

- topical ketoconazole,
- selenium sulfide and
- zinc pyrithione shampoo.

However, when it is more extensive, a short course of oral ketoconazole or itraconazole are preferable.

### *Remember...*

Oral terbinafine, although an antifungal agent, does not work for pityriasis versicolour as it is not excreted by the sweat glands.

## Lichen sclerosus

This disease is a chronic atrophic disorder of the anogenital skin (in 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 known as dells.

Associated symptoms include pain, dysuria, dyspareunia and intractable pruritus. 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*).

### Treatment

Symptomatic treatment is aimed at relieving pruritus (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.

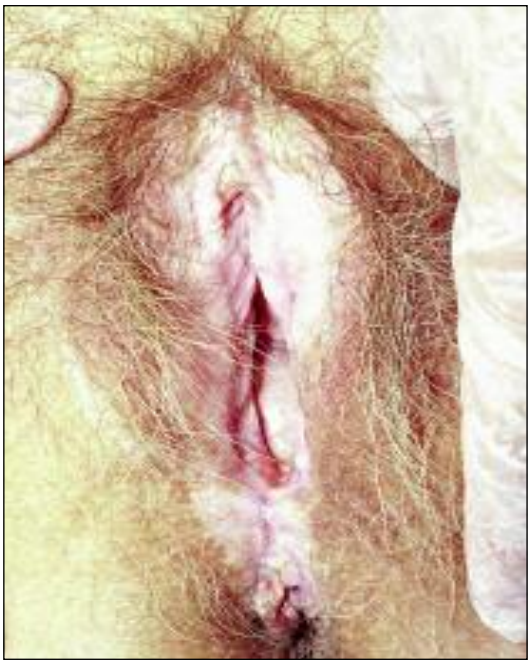
## Remember...

A number of conditions can produce a white vulvar lesion. These include:

- Lichen sclerosus
- Lichen planus
- Lichen simplex chronicus
- Mucous membrane pemphigoid
- Vulvar intraepithelial neoplasia
- Vitiligo

## Valerie's case

Valerie, 45, has recently developed an itchy, burning vulva. She was given topical imidazole cream and oral fluconazole, with no response. The burning is getting worse.



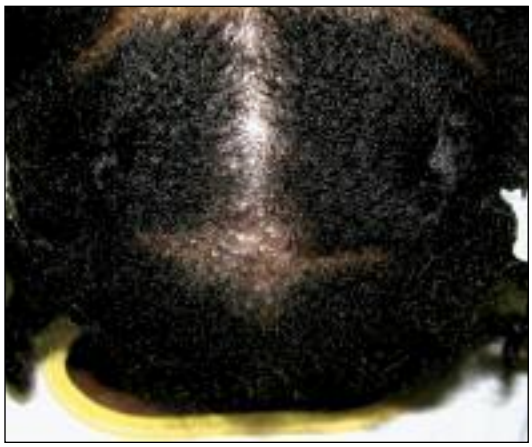
Photograph originally published in *The Canadian Journal of CME*, December 2004, Volume 16, Issue 12.

Always biopsy to confirm the diagnosis as each of these may be treated differently.

*This disease is a chronic atrophic disorder of the anogenital skin (in 85% to 98% of cases).*

## Irene's case

Irene, a 4-year-old African-American, presents with an itchy scalp, alopecia and fine scaling. Her cousin has the same disturbing symptoms. She was originally prescribed a topical steroid lotion, but now the condition has worsened.



### *Tinea capitis*

Tinea capitis[2] presents as a superficial fungal infection of the skin, scalp and hair shafts. It is the most common dermatophytosis in children. Consider tinea capitis if a patient has three of the symptoms listed below:

- scalp scaling,
- scalp pruritus,
- occipital adenopathy and
- diffuse, patchy, or discrete alopecia.

Other possible means of identifying this condition are:

- Branching hyphae and spores on potassium hydroxide (KOH) microscopy
- Wood's lamp test
- Fungal culture

### *Treatment*

Systemic therapy is required for the management of this condition. Topical agents are not effective for penetration to the hair root. Options of oral agents are:

- Terbinafine
- Itraconazole
- Fluconazole

Adjunctive antifungal shampoos or lotions may be helpful to decrease the shedding of viable spores. Examples are:

- selenium sulfide products,
- ketoconazole,
- ciclopirox and
- povidone iodine.

*Systemic therapy is required for the management of this condition. Topical agents are not effective for penetration to the hair root.*

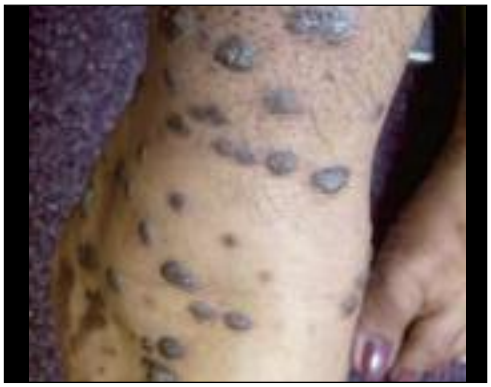
### *Remember...*

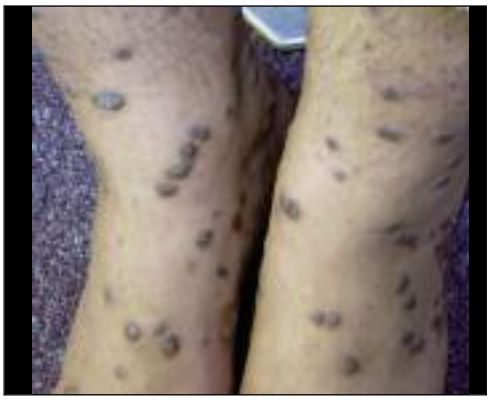
With a scaly scalp, although seborrhea may be common, always consider tinea capitis, as inappropriate and inadvisable use of topical steroids may certainly aggravate the eruption.

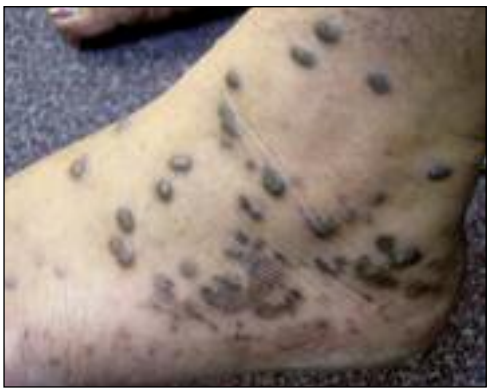
When in doubt, take a sample of scales and hair for KOH and culture.

## Leslie's case

Leslie, 38, has pruritic, mauve lesions on the ankles and dorsum of her feet. The lesions are fixed in shape and site and feel normal on palpation. The borders are well-defined and some lesions have a flat and shiny surface.







## *Lichen planus*

Lichen planus commonly presents on the flexor surfaces of the body and on the trunk/limbs, as well as on areas that have experienced trauma. Mucous membranes and the scalp (lichen planopilarus) can also be affected.

### *Treatment*

Lichen planus can resolve on its own (papules change colour from mauve-to-brown), but treatment is often required due to the extreme itch. Superpotent topical steroids should be used twice a day for two to four weeks. Intralesional corticosteroids and oral antihistamines may also provide relief.

*Lichen planus can resolve on its own, but treatment is often required due to the extreme itch.*

## *Remember...*

Remember the "P" words associated with lichen planus. These are useful in the diagnosis:

- Plentiful
- Purple
- Papules
- Pruritic
- Polygonal
- Penis Dx

References

1. Gupta AK, Jain HC, Lynde CW, et al: Prevalence and Epidemiology of Onychomycosis in Patients Visiting Physicians' Offices: A Multicenter Canadian Survey of 15,000 Patients. J Am Acad Dermatol 2000; 43(2 Pt 1):244-8.
2. Hainer BL: Dermatophyte Infections. Am Fam Physician 2003; 67(1):101-8.