The Derm Insider:

Continuing Skin Education

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The following is a list of interesting cases to help clinicians sharpen their dermatological skills. Test your knowledge by reading through these cases.

Case 1: Leslie's lesion

A 40-year-old Caucasian woman presents with a three-month history of a lesion on her calf (Figure 1). It has a well demarcated, raised and firm border. She recalls hitting the same area with her car door a few weeks earlier. The lesion is asymptomatic.

What is the most likely diagnosis? To find out, turn to page 73.

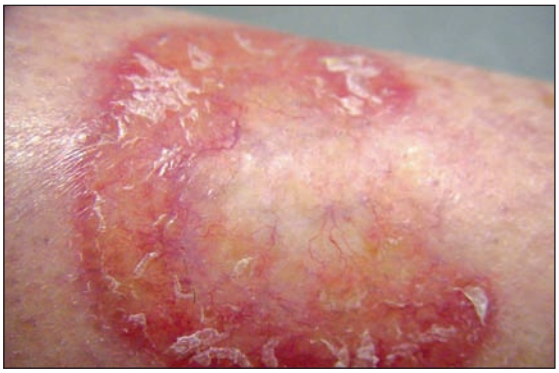

Figure 1. Leslie's lesion.

Case 2: Ursula's ulcers

A 45-year-old Caucasian woman presents with a two-month history of ulcers on both of her calves (Figure 2). She explains that the lesions have gradually enlarged over the past few months and that they are extremely tender. The patient has renal failure.

What can it be? Find out on page 73.

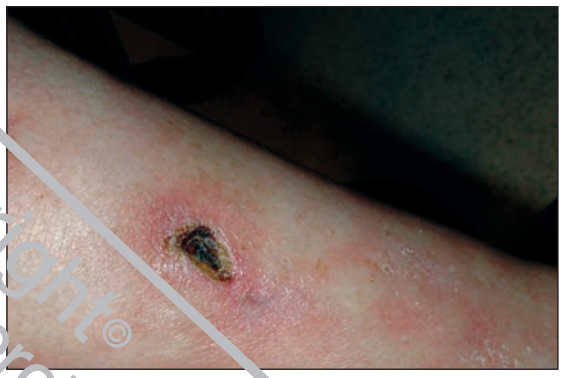

Figure 2. Ursula's ulcers.

Case 3: Fred's fingernails

A 64-year-old man presents with the following discolouration of his fingernail plates. The nails are asymptomatic. He is healthy, with a history of congestive heart failure.

What's wrong with Fred's fingernails? More on page 73.

Figure 3. Fred's fingernails.

Case 4: Brenda's bald spots

A 16-year-old girl presents with a three-month history of a gradually progressive round, bald patch on her scalp. Closer examination of the periphery reveals multiple short, broken-off hair shafts. The lesion is asymptomatic. The patient has hypothyroidism.

For more on Brenda, turn to page 73.

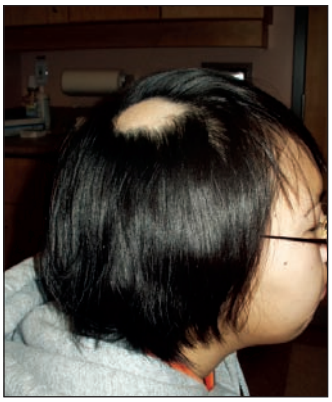

Figure 4. Brenda's bald spots.

Case 5: Isabelle's itch

A 45-year-old woman presents with a three-month history of a very itchy skin eruption, scattered on her trunk and her extremities, including her wrists (Figure 5). Her medical history is significant for hepatitis C.

What is Isabelle's diagnosis?
Turn to page 74 to find out.

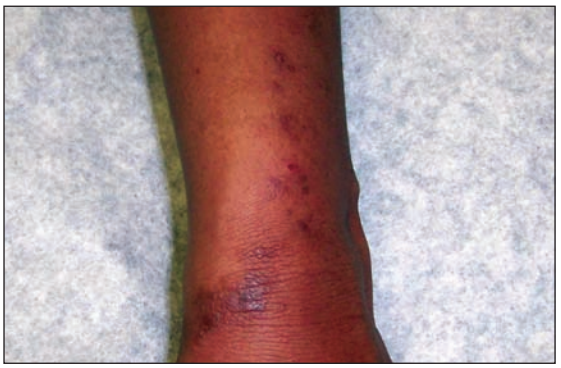

Figure 5. Isabelle's itch.

Case 6: Louie's left foot

A 19-year-old man presents with an 18-month history of a steadily enlarging patch of white skin on his left foot (Figure 6). He is otherwise healthy with no other skin or medical problems. His family history is negative for similar skin problems.

What's wrong with Louie's foot?
Look to page 74 for the answer.

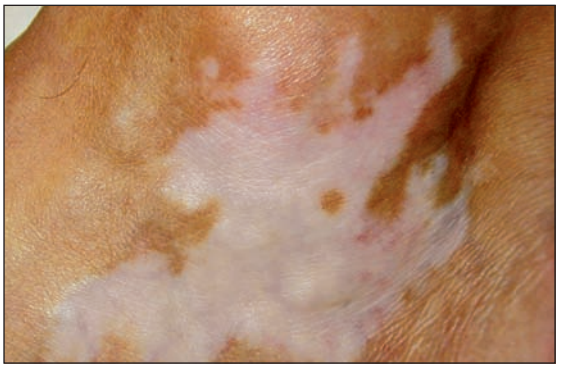

Figure 6. Louie's left foot.

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Answers:

The following are the diagnoses for the previous dermatological cases.

Case 1: Leslie's lesion

Leslie has **necrobiosis lipoidica diabeticorum** (NLD). With this disorder, the lesions are almost always sharply circumscribed and appear as pink-to-yellow plaques on the anterior and lateral surfaces of the lower legs. Trauma to the site can be an initiating factor. Approximately 66% of patients with NLD have overt diabetes mellitus and the remaining majority demonstrate abnormal glucose tolerance. Lesions may ulcerate due to the fragility of the skin.

Treatment for this disorder often involves a potent topical corticosteroid under occlusion or intra-lesional injections of cortisone. Ulcerated lesions should be treated with topical antibiotics and wound dressings until they heal.

Case 2: Ursula's ulcers

Ursula is suffering from an ulcerative disorder called **calciphylaxis**. It is characterized by progressive skin necrosis associated with small and medium-sized vessel calcification. Painful, sharply-demarcated ulcers surrounded by a purple zone characterize this condition. Lesions may also appear on the:

- abdomen,
- buttocks,
- penis and
- fingers.

It is imperative to note that calciphylaxis is almost always the external manifestation of:

- renal disease,
- diabetes mellitus, or
- advanced HIV.

Medical care for this disorder is mainly supportive; a search for and correction of hypocalcemia and hyperphosphatemia should be performed. Prevention of super-infection and sepsis is key to avoiding a medical emergency.

Case 3: Fred's fingernails

Fred's condition is called **Terry's nail**. It is characterized by the redness of the distal third of the nail and pallor of the proximal two-thirds. The pallor corresponds to nail bed edema and it is seen with congestive heart failure or hypoalbuminemia associated with hepatic cirrhosis. Terry's nail is found in 10% of patients with uremia, from chronic renal failure. Finding and treating the underlying cause of Terry's nail usually results in the correction of this condition.

Case 4: Brenda's bald spots

This is a case of **alopecia areata**. It is a form of non-scarring hair loss that results from a lymphocyte-mediated attack on an individual's hair follicles. It may be associated with other autoimmune disorders, such as thyroid disease and vitiligo. The condition may affect only:

- the focal areas,
- the entire scalp (alopecia totalis) or
- all hair-bearing areas of the body (alopecia universalis).

Clinical course is variable, but 80% of patients experience complete regrowth within two years, even without treatment.

Topical and intralesional corticosteroid therapy may expedite resolution by causing local immunosuppression.

Case 5: Isabelle's itch

Isabelle's diagnosis is **lichen planus**, a common skin condition characterized by numerous lesions that demonstrate the 5 Ps. They are:

- pruritic,
- purple (not just pink),
- polygonal (multisided, not just round),
- papules (raised lesions) that are
- planar (flat-topped, not dome-shaped).

Lesions may demonstrate Wickham's striae, fine lacy-white lines on the surface. The cause of lichen planus is unknown, but it has been associated with hepatitis C infection, especially when it is widespread or noted inside the mouth. Care must be taken to protect the skin, as lesions may appear at sites of minimal skin trauma (called koebnerization).

Treatment consists of topical and/or systemic corticosteroids to reduce inflammation. Resistant lesions may respond to antimalarials or methotrexate.

Case 6: Louie's left foot

Louie's well-demarcated depigmented patch is typical of **vitiligo**. This condition is believed to be caused largely by an autoimmune response against skin melanocytes and it can be associated with other diseases, including:

- pernicious anemia,
- thyroid disease and
- diabetes mellitus.

One-third of cases demonstrate a positive family history. Topical sunscreens are recommended as depigmented areas lack natural sun protection against photodamage.

Treatment is generally unsatisfactory, but improvement may be obtained by:

- potent topical steroids,
- phototherapy with psoralen and UVA (PUVA) and
- surgical micrografting.

Cosmetic camouflage is often useful. Some patients with very extensive vitiligo and only small areas of normally pigmented skin may benefit cosmetically from permanent depigmentation.

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