



This month – 6 cases:

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Case 1

Swelling of the Face

A 73-year-old male presents with a two day history of red swelling over the left side of his face which is gradually spreading to the right side. It is associated with fever, malaise and “flu-like” symptoms.

What is your diagnosis?

- Allergic contact dermatitis
- Angioedema
- Erysipelas
- Lupus erythematosus

Answer

Erysipelas (**answer c**) is an acute superficial cellulitis usually caused by group A streptococci and characterized by involvement of the lymphatics. It shows well demarcated erythema, edema and tenderness. Erysipelas usually affects the face (where it may be bilateral) or the lower leg and appears as a painful red swelling. The lesion has a well-defined edge and may blister. Streptococci enter through a small break in the skin, such as a fissure or small puncture wound. The condition tends to recur in the same place.



Penicillin is the treatment of choice. Erythromycin is used if there is penicillin allergy. Recurrent erysipelas (more than two episodes at one site), requires prophylactic long-term penicillin V-250 mg q.d. or b.i.d.

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Case 2

Back Lump

A 63-year-old male presents with a long-standing history of a soft, large lump on his back. It is asymptomatic, but his new girlfriend does not care for it.

What is your diagnosis?

- a. Lipoma
- b. Epidermoid cyst
- c. Milia cyst
- d. Neurofibroma
- e. Large dermatofibroma

Answer

A lipoma (**answer a**) is a benign tumour of fat cells in the subcutaneous tissue typically measuring 2 cm to 10 cm. The diagnosis is clinical and obvious in most cases and the lesions rarely cause any problems. They are occasionally tender, although this is a more common feature with angiolipomas. They present as discrete, soft-rubbery masses on the trunk and upper arms. Lipomas can develop at any age, but typically in adulthood. Most lipomas are small, superficial and solitary.

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Other less common types include:

- diffuse congenital lipomatosis,
- benign symmetric lipomatosis,
- Dercum disease (painful lipomas; usually obese post-menopausal women),
- angiolipomas (painful),
- hibernomas and
- familial multiple lipomatosis.

The diagnosis is usually made clinically. A CT scan or fine-needle aspiration can be considered if liposarcoma is in the differential. Lipomas are histologically similar to normal fat, although biochemically it differs in having higher levels of lipoprotein lipase. Various surgical techniques have been employed and occasionally liposuction is used.

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Case 3

Scaly Lesion

This 60-year-old gentleman wanted this lesion to be checked during his yearly physical. He has had it for quite a few years and is not bothered by it, but he was concerned that it could lead to skin cancer.

What is your diagnosis?

- a. Malignant Melanoma
- b. Keratoacanthoma
- c. Sebaceous Cyst
- d. Seborrheic Keratosis
- e. Basal Cell Carcinoma

Answer

Seborrheic keratosis (SK) (**answer d**) are the most common benign tumours in older individuals. SKs have a variety of clinical appearances and they develop from the proliferation of epidermal cells. Although no specific etiologic factors have been identified, they occur more frequently in sunlight-exposed areas.

They are classically described as looking like someone took clay or a blob of dirt and “stuck” it on the skin. The edge of the SK is not attached to the underlying skin making it appear that it could be removed by picking it off with your fingernail. This is because SKs arise from the epidermis, or top layer of skin. They do not extend deep into the skin like warts. What you see is what you get.

When correctly diagnosed, no treatment is necessary. There is a small risk of localized



infection caused by picking at the lesion. If a growth becomes excessively itchy or is irritated by clothing or jewelry, it can be removed by cryosurgery.

Small lesions can be treated with light electrocautery. Larger lesions can be treated with electrodesiccation and curettage, shave excision, or cryotherapy. When correctly performed, removal of SKs will not cause much visible scarring except in darkly coloured persons.

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 in Mississauga, Ontario.



Case 4

White Toenails

A 10-year-old boy presents with whitish discolouration of the toenails. His father has the same problem.

What is your diagnosis?

- a. Onychomycosis
- b. Nail dystrophy
- c. Psoriasis
- d. Melanonychia striata

Answer

Onychomycosis (tinea unguium) (**answer a**) refers to a fungal infection of the fingernails or toenails. The condition is usually caused by *Trichophyton rubrum*, *Trichophyton mentagrophytes* and *Epidermophyton floccosum*. The condition is more common in adults than in children. In those children that are affected, there is usually a positive family history of concomitant onychomycosis and/or tinea pedis. Children with Down syndrome and immunodeficiency are more likely to have onychomycosis. Toenails are affected more frequently than fingernails. Affected children often have coexisting tinea pedis.

The condition is more common in adults than in children.



The diagnosis can be confirmed by microscopic examination of potassium hydroxide wetmount preparation or fungal culture of the subungual debris or nail clippings.

Onychomycosis is best treated with oral antifungal agents such as terbinafine, fluconazole, or itraconazole in combination with trimming of the affected nails. Topical antifungal therapy is an important adjunct when tinea pedis is concomitantly present.

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Case 5

Skin Papules

A 75-year-old female presents with a three month history of purplish-red, itchy, flat papules on her trunk and extremities.

What is your diagnosis?

- a. Guttate psoriasis
- b. Pityriasis rosea
- c. Lichen planus
- d. Eczema
- e. Tinea corporis

Answer

Lichen planus (**answer c**) is an acute or chronic papulosquamous disorder which can involve the skin, nails or mucous membranes. Lichen planus presents clinically as pruritic, violaceous, flat-topped, polygonal papules which tend to favour the wrists, forearms and ankles. Lichen planus usually presenting between 30- and 60-years-of-age. It may resolve within one to two years or may be chronic and persistent.

The condition presents clinically as pruritic, violaceous, flat-topped, polygonal papules which tend to favor the wrists, forearms and ankles.



The inflammatory process which occurs in the development of lichen planus is thought to be immune mediated. T-cells infiltrate the epithelium, activating an immune response to trigger apoptosis, or programmed cell death, of basal keratinocytes.

Lichen planus may be treated with topical glucocorticoids or intralesional steroids. Other treatment options include systemic retinoids, phototherapy or rarely systemic immunosuppressive medications.

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**Case 6**

Patches of Hair

A three-year-old boy presents with multiple round patches of complete hair loss on his scalp. The scalp skin is normal and there is no family history of hair loss.

What is your diagnosis?

- a. Trichotillomania
- b. Traction alopecia
- c. Tinea capitis
- d. Lichen planopilaris
- e. Alopecia areata

Answer

Alopecia areata (AA) (**answer e**) is a common hair loss disorder characterized by the rapid development of hair loss in discrete oval or circular patches. The disease is likely mediated by an autoimmune mechanism involving T lymphocyte attack of the hair follicle. The initial patches usually develop on the scalp and leave behind a smooth hairless skin surface. Rarely, the skin is transiently erythematous or edematous. Regions of normal hair growth may separate the patches.

Characteristic “exclamation point” hairs can be found at the patch margins. Occasionally, nails have shallow pits. The diagnosis is clinical, based on the sudden appearance of the patches and absence of scaling or inflammation. The course is variable, but can lead to progressive hair loss. Treatment often necessitates potent topical corticosteroids and may need to be continued for several months.

Trichotillomania is an impulse control disorder whereby patients pull at their hair. The disorder is characterized by irregular areas of partial hair loss, where the affected patches are never completely bald, but contain hair shafts that are short or broken off at different lengths. The patches are in



easily reached locations of the scalp or head. Traction alopecia occurs in areas of the scalp under greatest tension from hair barrettes, pony-tails, or hot rollers. The distribution tends to be symmetrical.

Tinea capitis is a fungal infection of the scalp that usually involves scaling and inflammation of the scalp skin. Suboccipital or cervical lymphadenopathy are common findings. Numerous dermatophytes have been implicated. Diagnosis may be made with skin scrapings or potassium hydroxide wet mount preparations of the hair shaft, but the gold standard is fungal culture.

Lichen planopilaris is a disease that can affect any hair-bearing area of the body, characterized by regions of violaceous erythema surrounding keratotic plugs. Over time it may result in scarring alopecia, often at the scalp vertex. The affected patches are small, atrophic, shiny, white or pink.

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