



This month – 9 cases:

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Case 1

Scaly Plaqued Scalp

A 66-year-old healthy male presents with a nine-month history of red, scaly plaques on his scalp, as well as erythema, scaling and pruritus inside the ear canal.

What is your diagnosis?

- Eczema
- Seborrheic dermatitis
- Allergic contact dermatitis
- Tinea capitis
- Psoriasis

Answer

Scalp psoriasis (**answer e**) as manifested by his well-defined erythematous scaly plaques on his scalp. Psoriasis can be noted exclusively on the scalp, but more commonly as part of a widespread condition. The scalp plaques of psoriasis tend to be thick and more resistant to treatment and are often pruritic. When mild or early on, scalp psoriasis can be difficult to distinguish from seborrheic dermatitis and sometimes the term “sebopsoriasis” is employed. Hair thinning and hair loss is reported by some patients in areas affected by psoriasis.



Potent topical steroid lotions are frequently employed to manage scalp psoriasis. As well, topical combination products, calcipotriol lotion and overnight scalp oils can be helpful. Medicated steroid shampoos or tar-based shampoos are useful adjuncts. For topical therapy resistant cases, phototherapy can be employed (if there is not much hair, mainly in men). Oral methotrexate or biologic agents can also be considered.

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Case 2

Protruding Lesion

An 11-month-old infant is noticed to have a soft tissue lesion protruding from the median raphé. The lesion is asymptomatic and irreducible.

What is your diagnosis?

- a. Perianal abscess
- b. Infantile perianal pyramidal protrusion
- c. Hemorrhoid
- d. Rectal prolapse

Answer

Infantile perianal pyramidal protrusion (**answer b**) is an outward projection of essentially normal redundant skin in the perineum. Typically, the lesion presents as a pyramidal-shaped, flesh-to pink-coloured, soft-tissue protrusion with a smooth surface. The lesion is usually located on the perianal median raphé, anterior to the anus and is asymptomatic.

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The exact etiology is not known. It is presumed that the mechanical irritation of wiping after defecation or defecation of hard stool might cause the protrusion. There is a preponderance of females affected. The condition is more common in infants with anal fissures and genito-anal lichen sclerosus et atrophicus. The condition is usually self-limited, often lasting a few months. Underlying conditions such as anal fissure or constipation, if present, should be treated.

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Case 3

Bump on the Knee

This 60-year-old lady presented with painful swelling of the knee which has been present for a few days. On taking a detailed history of the patient, she indicates that she has had this swelling for a few years but it has become painful within the recent days.

What is your diagnosis?

- Lipoma
- Sarcoma
- Sebaceous cyst
- Prepatellar bursitis

Answer

Prepatellar bursitis (**answer d**), also known as housemaid's knee, is a common cause of swelling and pain on top of the kneecap. The name "housemaid's knee" comes from the association of this condition with individuals whose work necessitates kneeling for extended periods of time and is most commonly found in professions such as carpet layers and gardeners. The symptoms of prepatellar bursitis or knee bursitis include:

- Swelling over the kneecap
- Limited motion of the knee
- Painful movement of the knee

The swelling of knee bursitis is within the bursa and not the knee joint itself. People often call any swelling of the knee joint "water on the knee," but it is important to differentiate fluid accumulation within the bursa vs fluid accumulation within the knee joint. Symptoms of prepatellar bursitis are usually aggravated by kneeling and relieved when sitting still.



Treatment of prepatellar bursitis begins with avoidance of the aggravating activity. In some individuals, drainage or excision of the bursa may be indicated. In cases of infection, it is important that antibiotics are also administered. If a bursa is drained, this can be performed in the office using a needle and a syringe. This is especially helpful in cases of possible infection. The fluid can then be analyzed to detect possible infection. If the fluid continues to accumulate, excising or removing the bursa can be considered. This procedure is performed as an outpatient in the OR.

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Case 4

Growth on the Cheek

An active and healthy six-year-old boy presents to the office with a two month history of a prominent bump on his cheek. On exam, there is a solitary yellow cystic lesion with an erythematous rim on the left cheek which is firm and mobile on palpation. Examination for Teeter totter sign, tent sign and Darier's sign were all negative.

What is your diagnosis?

- a. Epidermal inclusion cyst
- b. Pilomatricoma
- c. Juvenile xanthogranuloma
- d. Mastocytoma
- e. Planar xanthoma

Answer

Epidermal inclusion cysts (**answer a**) arise from traumatic implantation of epidermis into the dermis. They are nodules that are firm, round and mobile. A central pore or punctum may be present. Treatment is surgical excision.

Pilomatricomas are also firm solitary papulonodular lesions. However, characteristic Teeter totter and tent signs are negative, making this a less likely diagnosis.

They are nodules that are firm, round and mobile.



The lesions of a juvenile xanthogranuloma tend to be more erythematous to orange and then become more yellow with time.

Mastocytomas will become itchy and whealing with stroking (positive Darier's sign).

Planar xanthomas are soft, rather than firm on palpation and are often associated with a history of dyslipidemia.

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Case 5

Shiny Lesion

A shiny lesion appeared at the edge of the urethra seven months ago in a 14-year-old boy. It is asymptomatic.

What is your diagnosis?

- a. A venereal wart
- b. Bowen's disease
- c. Hidrocystoma
- d. Urethral sinus
- e. Chronic herpes

Answer

Hidrocystoma (**answer c**) is a benign cystic proliferation of the apocrine or eccrine glands. The cysts are translucent usually solitary and more commonly at the canthal margins of the eye where it is an apocrine proliferation. Such cysts can also occur on the penis, axilla and neck. This cyst was of eccrine derivation.

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All such lesions are benign and easily drained or better still, cauterized to prevent a recurrence. Laser vapourization and topical trichloroacetic acid application where there are a larger number of lesions has also been tried.

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Case 6

A Congenital Bald Plaque

A 12-year-old boy presents with a congenital lesion on the left posterior scalp. This has been gradually enlarging and getting slightly thicker.

What is your diagnosis?

- Congenital nevus
- Seborrheic keratosis
- Wart
- Nevus sebaceous of Jadassohn
- Alopecia after birth-related caput succedaneum

Answer

Nevus sebaceous of Jadassohn (**answer d**) most commonly presents as a solitary, yellow, orange, hairless plaque typically occurring on the scalp or face and is usually present at birth. These hairless plaques can appear in a variety of colours such as yellow, brown, orange or pink and range from several millimetres up to several centimetres.

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These lesions consist of sebaceous glands, hair follicles and occasionally atopic apocrine glands, with a raised and often linear appearance. Nevus sebaceous of Jadassohn tends to grow slowly over time and becomes thicker as patients age. Up to 15% of these lesions may develop neoplastic changes with basal cell carcinoma, syringocystadenoma papilliferum occurring within. Lesions can be followed over time and may be excised on an elective basis.

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Case 7

A Hairy Birthmark

This 22-year-old male is concerned about his pigmented lesion on the side of his chest. The lesion has been present since birth with a slowly growing irregular border and verrucous surface containing hair. During the last six months he found a black spot on one side of his lesion and decided to see a physician.

What is your diagnosis?

- a. Junction nevus
- b. Compound nevus
- c. Congenital hairy nevus
- d. Dermal nevus

Answer

Congenital hairy nevus (**answer c**) birthmarks are present at birth and vary in size from a few millimetres to several centimetres covering wide areas of trunk, an extremity, or the face. They are present at birth but may continue to develop in infancy. The largest lesions are referred to as giant hairy nevi. Congenital nevi may contain hair; if present, it is usually coarse. They are uniformly pigmented, with various shades of brown or black predominating.



Most are flat at birth, but become thicker during childhood and the surface becomes verrucous and sometimes nodular. The risk of developing melanoma in very large lesions is significant. Malignant transformation may occur early in childhood; therefore, large thick lesions should be removed as soon as possible.

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Case 8

Itchy Knees

A 13-year-old boy presents with itchy lesions in the posterior aspects of both knees for years. This child also has asthma.

What is your diagnosis?

- Nummular eczema
- Atopic dermatitis
- Seborrheic dermatitis
- Psoriasis

Answer

Atopic dermatitis (**answer b**) is a chronically relapsing dermatosis characterized by pruritus, erythema, vesiculation, papulation, exudation, excoriation, crusting, scaling and sometimes lichenification. This patient shows features of lichenification.

Atopic dermatitis affects 10% to 20% of school-aged children. It is an initiating factor in the atopic march as > 50% of patients with atopic dermatitis subsequently develop asthma or allergic rhinitis.

In infants, the eruption often affects the face and scalp, although the extensor surfaces of the extremities and the trunk may also be affected. In older children and adolescents, the neck and antecubital and popliteal fossae usually display the eruption. The nose is often spared and is referred to as the “head light” sign.

Lesions are classified as acute, subacute, or chronic and are usually symmetrical. Acute lesions are intensely pruritic, erythematous papules, papulovesicles, or weeping lesions. Subacute lesions are erythematous scaling papules or plaques. Chronic lesions



are characterized by prominent scaling, excoriations and lichenification in classically affected body areas.

Avoidance of triggering factors, optimal skin care and topical corticosteroids are the mainstay of therapy for atopic dermatitis. Topical immunomodulators (tacrolimus and pimecrolimus) are beneficial and safe for adults and children more than two-years-of-age. Topical immunomodulators represent a major new alternative to chronic corticosteroid use.

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**Case 9**

Blue-Grey Patches

A two-year-old Native American boy presents to the ER with a three-day history of loose stools, low-grade fever and irritability. During your exam you notice large, homogenous, blue-grey patches on his back and buttocks. When questioned, his mother replies, “Oh, he’s always had those.” Prior to the diarrheal illness, he has been otherwise healthy. He has met his developmental milestones and has no abnormal facies.

What is your diagnosis?

- a. Dermal melanocytosis
- b. Hunter syndrome
- c. GM1 gangliosidosis type 1
- d. Child abuse
- e. Nevi of Ota and Ito

Answer

Dermal melanocytosis (**answer a**), or “Mongolian spots,” are benign, poorly circumscribed brown, grey or blue macules or patches found in dark-skinned infants. These lesions are typically located on the back, buttocks or lower limbs. Dermal melanocytosis is caused by arrest of embryonal migration of melanocytes. Most disappear by the time children are school-aged. There is no treatment necessary.

Dermal melanocytosis is also seen in Hunter syndrome and GM1 gangliosidosis type 1. Hunter syndrome is an x-linked recessive disorder and affected children have numerous abnormalities including characteristic facies, frequent respiratory infections



and abdominal hernias. GM1 gangliosidosis type 1 is a rare autosomal recessive metabolic disease with numerous other manifestations including coarse facies and cherry-red macular spots. Child abuse must be considered in this case as these lesions look similar to bruises. However, in child abuse, bruises are often present at different stages of healing. Nevi of Ota and Ito have similar colouration as dermal melanocytosis but are distributed over the first and second divisions of the trigeminal nerve.

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