



This month – 7 cases:

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Case 1

A Red, Vascular Nodule

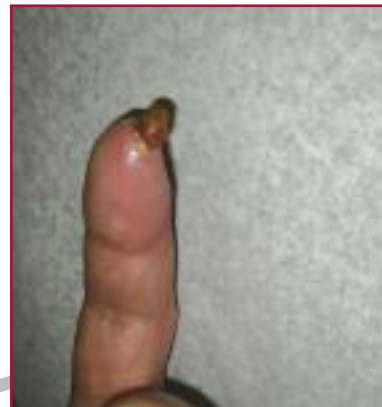
A 25-year-old female presents with a three week history of a rapidly-growing red nodule localized to her left index finger.

What is your diagnosis?

- Wart
- Ganglion cyst
- Acquired digital fibrokeratoma
- Pyogenic granuloma
- Digital myxoid cyst

Answer

Pyogenic granuloma (PG, also known as Lobular Capillary Hemangioma) (**answer d**) is a benign, small, almost always solitary, pedunculated, red nodule that is common in young children and young adults. The name itself is a misnomer in that PG is neither granulomatous nor infectious. The cause of PG is unknown. They often occur on exposed surfaces of the nail folds, fingers, forearms, face, or sites of trauma. PGs usually evolve rapidly over a period of a few weeks. PGs bleed easily on the slightest trauma. Treatment is definitively surgical, shave excision followed curettage and electrodesiccation of the base is a commonly-employed treatment strategy; however, punch excision, laser therapy and cryotherapy have also been utilized.



These nodules often occur on exposed surfaces of the nail folds, fingers, forearms, face, or sites of trauma.

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Case 2

A Bald Spot

This young girl presents with a growing asymptomatic bald spot on her scalp. She had a similar one two years ago.

What is your diagnosis?

- a. Alopecia areata
- b. Androgenetic alopecia
- c. Lichen planopilaris
- d. Discoid lupus erythematosus
- e. Acne keloidalis nuchae

Answer

Alopecia areata (**answer a**) is characterized by the sudden appearance of well-demarcated, round or oval patches of hair loss with no scaling, scarring, erythema, or atrophy of the affected areas. It most commonly involves the scalp but can affect any hair-bearing area of the body, including eyebrows, eyelashes, body hair, pubic hair and the bearded area in males. Patients may present with a single patch or multiple patches of hair loss. In more severe forms, the patients may lose all hair on the scalp (alopecia totalis) or all hair on the body (alopecia universalis).

The nails may also be involved. The characteristic findings are fine pitting (hammered brass appearance), rough surface (trachyonychia) and mottled lunula.

Alopecia areata is considered to be an autoimmune disorder that affects both children and adults. The diagnosis is usually made on clinical grounds and the presence of short hair shafts that are broad distally and tapered proximally (exclamation hairs) are considered pathognomonic.



Spontaneous remission with slow regrowth of hair is common but frequent recurrences do occur. Suggested treatment modalities to control the condition and promote the regrowth of hair include:

- superpotent topical corticosteroids,
- intralesional corticosteroid injections (e.g., triamcinolone acetonide) and/or
- topical immunotherapy to induce local allergic contact dermatitis (diphenylcyclopropenone).

Extensive alopecia areata should probably be referred to a specialist for discussion of treatment options.

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Case 3

A Changing Body

This lady presents with unintentional weight loss and with heat intolerance.

What is your diagnosis?

- Myasthenia gravis
- Hypothyroidism
- Grave's disease
- Eaton-Lambert syndrome.

Answer

Grave's disease (**answer c**) is common, especially in women aged 30 to 50 years. Genetic influence is also a factor. The prevalence of Grave's disease is 9:1 for females to males. The disease likely results from antibodies against thyroid stimulating hormone (TSH) receptors.

Symptoms are:

- decreased weight despite increased appetite,
- frequent stools,
- tremor,
- irritability,
- frenetic activity,
- emotional lability,
- dislike of hot weather,
- sweating,
- itch and
- oligomenorrhea.

Infertility may also be a presenting problem.

Other symptoms include:

- tachycardia (even sleeping),
- atrial fibrillation,
- warm peripheries,
- fine tremor,
- thyroid enlargement,



- bulging eyes (exophthalmos),
- lid lag (eyelid lags behind eye's descent as patient watches your finger descend slowly),
- ophthalmoplegia,
- vitiligo,
- pretibial myxoedema (edematous swellings above lateral malleolus) and
- thyroid acropachy.

The disease likely results from antibodies against TSH-receptors.

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

Mottled Skin

A three-week-old infant is noted to have mottled skin on the limbs and trunk. The mottling was reticular-patterned and reddish, becoming more intense after exposure to cold temperatures and disappears on warming. The mottling developed at two-weeks-of-age and has persisted.

What is your diagnosis?

- a. Livedo reticularis
- b. Cutis marmorata
- c. Livedo racemosa
- d. Harlequin colour change

Answer

Cutis marmorata (**answer b**) is characterized by a symmetrical, reticular and reddish mottling of the skin after exposure to cold temperatures. The evanescent lacy network of small blood vessels is due to an exaggerated vasomotor response to cold temperatures that produces vasospasm, with subsequent hypoxia and vasodilation of venules and capillaries. The mottling disappears when the skin is warmed. In most children, the tendency to mottle resolves by six-to-12 months of age. Cutis marmorata is more common in children with:

- Menkes disease
- Familial dysautonomia
- Hypothyroidism
- Down Syndrome
- Trisomy 18
- De Lange syndrome



Livedo reticularis presents with a similar clinical picture but unlike cutis marmorata, the mottling does not disappear when the skin is warmed.

The mottling in livedo racemosa consists of irregular, broken circular segments and does not disappear when the skin is warmed.

Harlequin color change is due to an imbalance of the autonomic vascular regulatory mechanism. When the infant is placed on the side, the body is bisected into a deep red lower half and a paler upper half.

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Case 5

Persistent Lesions

This 35-year-old African American male has noted more frequent and persistent lesions on the nape of his neck.

What is your diagnosis?

- a. Tinea capitis
- b. Folliculitis
- c. Keloidalis nuchae
- d. Impetigo
- e. Hypertrophic eczema

Answer

Keloidalis nuchae (**answer c**) is a common condition in African American males as their hair is curly and the curved shaft of the shaved hair grows back into the skin. This results in the formation of a foreign body reaction to the keratin consisting initially of inflammatory papules and pustules; hence its confusion with acne or folliculitis. The pustules are sterile.

A similar reaction in the beard area is often referred to as pseudofolliculitis barbae. The persistence of such lesions results in hyperpigmentation and small keloid scars.

Treatment is difficult because of the inherent problem of ingrown hairs.



Treatment is difficult because of the inherent problem of ingrown hairs. The treatment is not that of an infection but for the reaction to the invaginated keratin. Therefore, treatment includes:

- No close hair cuts
- Removal of invaginated hairs, where visible
- Reducing inflammation by use of potent topical steroids (at times, intralesional steroids are required)
- Where scarring is prominent, a shave removal of the scars, followed by intralesional steroids, may be helpful

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Case 6

A Tongue Deformity

This lady has a right-sided tongue deformity, which she said happened after she had surgery to remove a benign tumour from the right side of her neck. She was told that she sustained a nerve injury due to the operation.

What is your diagnosis?

- Glossopharyngeal
- Vagus
- Accessory
- Right hypoglossal
- Left hypoglossal

Answer

Right hypoglossal nerve (**answer d**). The lower four cranial nerves (nine to 12), which lie in the medulla, are usually affected together; isolated lesions are rare apart from the isolated cranial nerve (12) which can be injured by neck tumours or surgeries to remove them.

A bulbar palsy is a weakness of the lower motor neuron type of the muscles, supplied by these cranial nerves. There is dysarthria, dysphagia and nasal regurgitation. The tongue is weak, wasted and fasciculating.

The most common causes of a bulbar palsy are motor neuron disease, syringobulbia and Guillain-Barre syndrome.

Pseudobulbar palsy is an upper motor neuron weakness of the same muscle groups. There is also dysarthria, dysphagia and nasal regurgitation, but the tongue is small and spastic and there is no fasciculation. The jaw jerk is exaggerated and the



patient is emotionally labile. In many patients, there is a partial palsy with only some of these features. The most common cause of pseudobulbar palsy is a stroke, but it may also occur in motor neuron disease and multiple sclerosis.

A bulbar palsy is a weakness of the lower motor neuron type of the muscles, supplied by these cranial nerves.

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Case 7

A Puzzling Growth

An elderly gentleman presents with a few months history of a puzzling growth on his face.

What is your diagnosis?

- a. Nodular melanoma
- b. Squamous cell carcinoma
- c. Nodular basal cell carcinoma
- d. Dermatofibroma
- e. Irritated seborrheic keratosis

Answer

Squamous cell carcinoma (SCC) (**answer b**) typically presents on sun-exposed areas as a round, firm, slow-growing papule, plaque or nodule often with a thick, central hyperkeratotic scale or crust. Common sites of involvement include the:

- scalp,
- cheek,
- nose,
- lower lip,
- tip of ear,
- pre- and postauricular areas and
- dorsae of hands.

SCC can arise from normal appearing skin or from sun-induced precancerous lesions, such as actinic keratoses or actinic cheilitis. SCC is usually asymptomatic but may bleed or cause slight pain.

SCC is a malignant tumour of epidermal keratinocytes. Compared to basal cell carcinoma, SCC is less common but has a greater, although still quite low, propensity to metastasize. Risk factors for SCC include long-term sun exposure, fair complexion (skin types I and II), previous skin cancer and immunocompromised states. Diagnosis is confirmed with skin biopsy.



Treatment depends on the type, size and location of the lesion. Cure rates are high if treated early. Surgical treatment options include excision, cryosurgery, electrodesiccation and curettage and Mohs micrographic surgery. Nonsurgical treatment options include, only in specific circumstances:

- topical immunomodulatory therapy (imiquimod),
- topical chemotherapy (5-fluorouracil),
- photodynamic therapy and
- radiation therapy.

Prevention strategies to limit sun-exposure (e.g., protective clothing, sunscreen) and regular examination of skin by a family physician or dermatologist are essential.

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