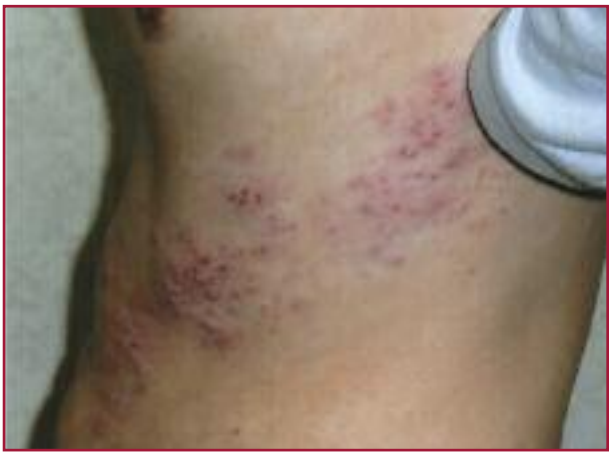
This month – 6 cases:

Case 1

Herpes Zoster

A 43-year-old man presents with a painful rash on the left side of his chest.



What is your diagnosis?

a. Molluscum contagiosum
b. Herpes zoster
c. Herpes simplex
d. Varicella

Answer

Herpes zoster (**answer b**) is caused by reactivation of latent varicella-zoster virus that resides in a dorsal root ganglion. The activated virus spreads along the corresponding cutaneous nerve to the adjacent skin. Herpes zoster can develop any time after a primary infection. In general, the onset of disease is heralded by pain within the dermatome and precedes the lesions by 48 to 72 hours. An area of erythema might precede the development of a group of vesicles. Vesicles may coalesce to form bullous lesions.

In young children, herpes zoster has a predilection for areas supplied by the cervical and sacral dermatomes whereas in adults, the lesions are more common in the lower thoracic and upper lumbar dermatomes. In general, herpes zoster is a milder disease in children than in adults. The most common complications are secondary bacterial infection, depigmentation, and scarring. Herpes zoster ophthalmicus may lead to severe pain in the eye, ophthalmoplegia, sclerokeratitis, anterior uveitis, and optic neuritis. Postherpetic neuralgia may also occur.

In immunocompromised individuals, the illness is more severe and prolonged. Other rare complications include encephalitis, ventriculitis, Ramsay Hunt syndrome, traverse myelitis, and motor nerve paresis. The diagnosis of herpes zoster is based on the distinctive clinical appearance. Laboratory tests are not usually necessary. Famciclovir, valacyclovir and acyclovir are the treatment of choice.

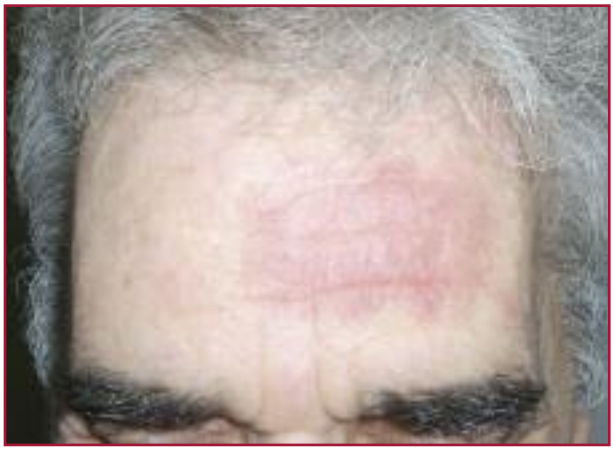
Alexander K.C. Leung, MBBS, FRCPC FRCP (UK & Irel), is a Clinical Professor of Pediatrics, the University of Calgary, Calgary, Alberta.

Justine H.S. Fong, MD, is a medical staff at the Asian Medical Clinic, an affiliate with the University of Calgary Medical Clinic.

Case 2

Itchy Forehead Rash

This gentleman has had this mildly itchy rash for a few years. He mentioned it during his yearly physical and wondered whether anything could be done about it.



What is your diagnosis?

a. Psoriasis
b. Allergic contact dermatitis Seborrheic dermatitis
c. Seborrheic dermatitis
d. Pityriasis versicolor

Answer

Seborrheic dermatitis (**answer c**) is an erythematous scaly eruption, usually in areas rich in sebaceous glands.

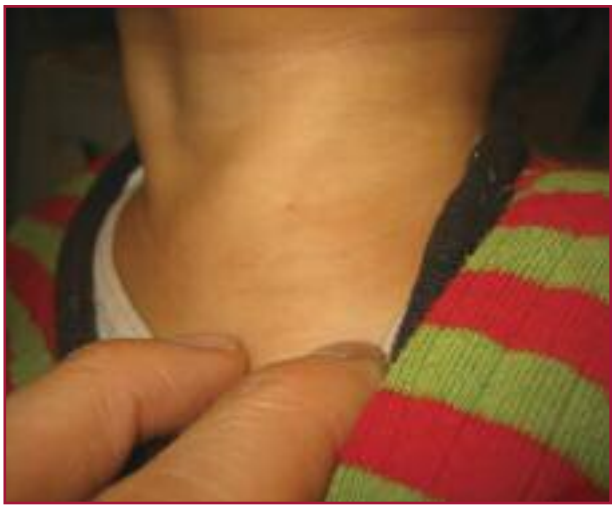
- Epidemiology: very common. Occurs in most infants and in many elderly patients
- Pathogenesis: two main factors are important, first is the presence of generous amounts of epidermal lipids and colonization, at least transiently by *Malassezia* species. Immune response also plays a role and tends to be far more severe in HIV/AIDS
- Many dermatologists believe that seborrheic dermatitis overlaps with psoriasis and may well be a minimal form of it
- Clinical features: they are erythematous red/yellow, poorly circumscribed patches with fine scale; only mildly pruritic
- The common sites are scalp (dandruff), eyebrows, perinasal areas, ears, retroauricular areas; less often anterior chest; annular forms are most common on the neck.
- Diagnosis: Clinical. If severe and acute, think of HIV/AIDS.
- Differential diagnosis: Psoriasis: lesions better circumscribed, thicker scale (definite overlap)
- Allergic contact dermatitis: more pruritic, less chronic, do patch testing if in doubt
- Truncal lesions: tinea corporis, pityriasis versicolor, do potassium hydroxide (KOH) examination, if in doubt.
- Therapy: Medicated shampoos such as ketoconazole, selenium sulphide or tar; alternating with regular shampoo: frequent shampooing helps
- For cutaneous lesions, either imidazole creams or lithium succinate cream
- If refractory: low-potency corticosteroid cream for 2-3 days or topical immunomodulatory agent (pimecrolimus or tacrolimus).

Hayder Kubba, MBChB, LMCC, CCFP, FRCS(UK), DFFP, DPD, 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 3

Cystic Chest Structure

A 23-month-old toddler presents with a pit over the left upper chest. On palpation, there is a cystic structure beneath the pit. It has been present since birth.



What is your diagnosis?

a. Branchial cleft cyst and sinus
b. Thyroglossal duct cyst
c. Accessory tragus
d. Epidermal inclusion cyst
e. Wattle

Answer

Branchial cleft cysts and sinuses (**answer a**) are found in the lower third of the lateral neck near the anterior border of the sternocleidomastoid muscle. They occur as a result of incorrect closure of the branchial clefts during embryonic development. They may open onto the skin surface or drain into the pharynx. Recurrent inflammation may occur and surgical removal is the definitive treatment.

On the contrary, thyroglossal cysts and sinuses are found on or near the midline of the neck and the cyst can be seen to move with swallowing. They may open onto the skin, extend to the tongue base, or drain into the pharynx. These are actually remnants of the embryonic structure that facilitates normal thyroid descent and thus may occasionally have ectopic thyroid tissue.

Accessory tragi are usually found in the preauricular area. These are branchial arch remnants. They present as fleshy papules that contain epidermal adnexal structures, and may or may not have a cartilaginous component.

Epidermal inclusion cysts are common, well-demarcated, slow-growing nodules that appear after puberty and are often found on the face, scalp, neck, trunk, or scrotum. They are firm to compressible in consistency and often may express keratinous material. Rupture of the cyst wall may induce inflammation.

A wattle is the cervical variant of an accessory tragus. They are found anterior the sternocleidomastoid muscle.

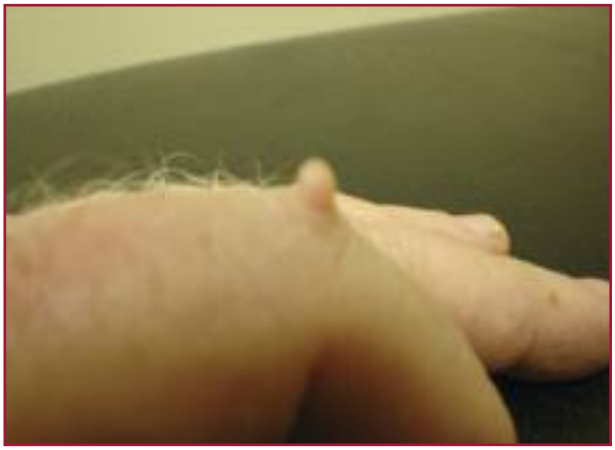
Ka Wai Yam MD, is a recent graduate from the Family Medicine program at the University of Calgary.

Joseph M. Lam MD, is a Pediatrician with fellowship training in pediatric dermatology. He practices in Vancouver, BC.

Case 4

Horn-Like Lesion

This 35-year-old male was concerned with a lesion that had developed on his finger within the last six months



What is your diagnosis?

a. verruca
b. solar horn
c. acquired digital fibrokeratoma
d. neuroma
e. supernummary digit

Answers

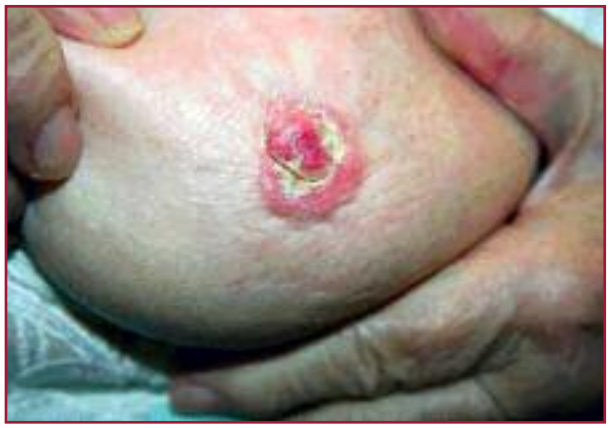
Acquired digital fibrokeratoma (**answer c**) occurs in middle aged adults on a finger, toe or palm. They are benign, solitary, pink, exophytic horn-like lesions, which have a collarette of elevated skin at their base. They are often confused with a rudimentary digit. They are easily removed by a shave excision.

Stanley Wine, MD, FRCPC, is a Dermatologist in North York, Ontario.

Case 5

Breast Disease

A 91-year-old female visits a clinic because she has developed an asymptomatic rash surrounding her left nipple. She has been using local steroid cream without improvement.



What is your diagnosis?

a. Nipple eczema
b. Superficial basal cell carcinoma
c. Paget's disease of the breast
d. Erosive adenomatosis of the nipple

Answer

Paget's disease of the breast (**answer c**) is a rare, distinctive cutaneous presentation of intraductal carcinoma of the breast. It occurs almost exclusively in women. The incidence increases with age. It is the most common cutaneous presentation of breast cancer and represents < 5% of all cases of breast cancer. It may be asymptomatic and when it is symptomatic patients complain of localized itching, irritation and discomfort. The incidence increases with age. It has an insidious onset, lasting months to years, usually in the fourth to sixth decades of life. Paget's disease should be suspected in cases of "nipple eczema" that do not improve after the use of topical corticosteroids. It is usually unilateral but it can be bilateral. The lesion is pink-to-red, sharply demarcated, irregular in shape, scaly patched or plaque. The process appears eczematous, but will not respond to topical steroids. The plaque can be indurated and has sharp margins. Initially induration is minimal but over time induration, infiltration and nodularity develop. A breast mass is palpable in 50% of cases. In some cases, we can see local destruction of the nipple and areola. Mammary Paget's disease is caused by the intraepidermal spread of malignant cells from an underlying intraductal carcinoma of the breast. The five-year survival rate is 90% when neither a breast mass nor regional lymph nodes are palpable but is roughly 40% when underlying breast mass is palpable.

Breast and nodal examination is indicated for all patients with Paget's disease. Skin biopsy must be performed to confirm the diagnosis. Mammography should also be performed.

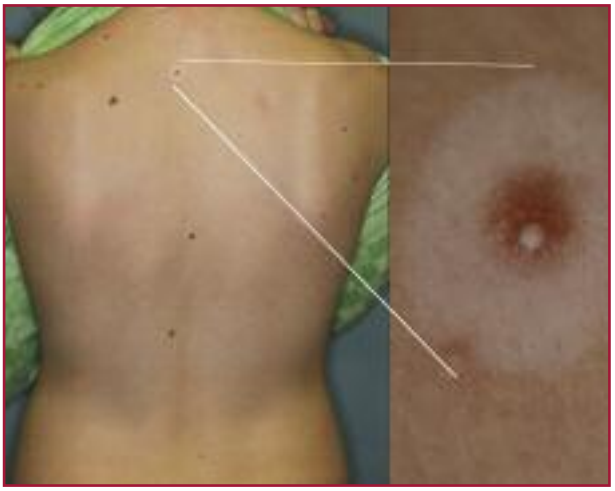
Jerzy K. Pawlak, MD, MSc, PhD, is a General Practitioner, Winnipeg, Manitoba.

T. J. Kroczak, is a Medical Doctor, University of Manitoba, Winnipeg, Manitoba.

Case 6

Depigmented Patch

A seven-year-old female presents with a reddish-brown papule surrounded by a border of depigmentation on her upper back. The papule was pre-existing however, the depigmented border has recently developed.



What is your diagnosis?

a. Blue nevus
b. Spitz's nevus
c. Melanoma
d. Halo nevus

Answer

Halo nevus (**answer d**), also referred to as "sutton's nevi," are a type of nevi that have round or oval borders of hypomelanosis (leukoderma) caused by a decrease or loss of melanocytes. With halo nevi, an inflammatory infiltration of lymphocytes occurs in the upper dermis and epidermal-dermal junction of the nevus causing melanocytes to degenerate, and eventually, the nevus to disappear. This type of nevus is most common in children and young adults.

Halo nevi can undergoe three stages:

- Depigmented border formation around pre-existing nevus
- Nevus involution and disappearance and repigmentation.

Each stage can take months to years.

A halo nevus, in its early stage, may have an atypical appearance and resemble melanoma due to the mass infiltration of lymphocytes. Halo nevi do not require treatment; however, a biopsy should be performed if a nevus appears atypical, to differentiate from melanoma.

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Amanda Webb BScH Research Assistant in the Division of Dermatology is a co author.