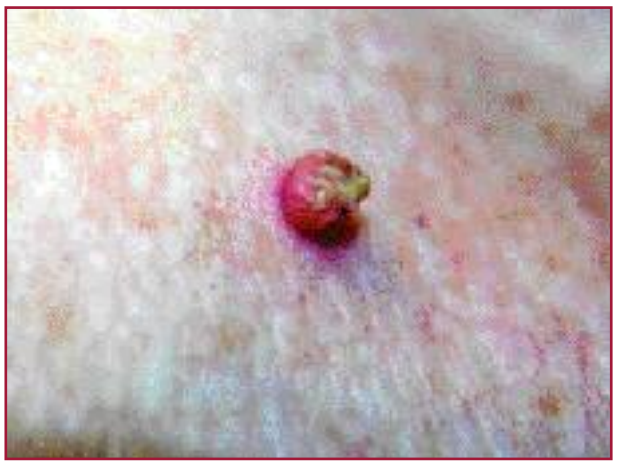
This month – 6 cases:

Case 1

Pink Skin Bump

An 83-year-old male with a long history of congestive heart disease presents with a small skin tag inflamed lesion over his upper chest. Excisional biopsy was done.



What is your diagnosis?

a. Squamous cell carcinoma
b. Infected tag
c. Basal cell carcinoma
d. Cutaneous lupus
e. Keratoacanthoma

Answer

Squamous cell carcinoma (SCC) **(answer a)**. Excisional biopsy showed well differentiated invasive SCC of the skin. SCC usually develops in sun exposed sites such as the face, neck, forearm or hand. The tumour may start within the actinic keratosis as a small papule which can progress to ulcerate and form a crust. This type of SCC does not commonly metastasize. The nodular type of SCC develops as a dome-shaped nodule sometimes, but not invariably, in sun-damaged skin. More aggressive ulcerating forms of SCC are seen developing at the edge of ulcers, in scars and at sites of radiation damage. Metastasis is found in ≥ 10% in these cancers.

Surgical excision is the treatment of choice. Small SCC evolving from actinic keratosis are treated by electrodesiccation and curettage. Larger tumours or those on or near the vermilion border of the lips are best excised. Larger tumours around the nose and eyes require special consideration and operation technique. Regional lymph nodes should be clinically examined.

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

T. J. Kroczak, BSc, is a Fourth-Year Medical Student, University of Manitoba, Winnipeg, Manitoba.

Case 2

Congenital Nodule in Eye Area

A seven-month-old infant presents with a congenital nodule over the lower border of the left lateral eyebrow. It has not shown any significant growth since birth.

What is your diagnosis?

a. Mastocytoma
b. Lipoma
c. Dermoid cyst
d. Pilomatricoma
e. Hemangioma of infancy

Answer

Dermoid cysts **(answer c)** are seen at birth and arise when the developmental epithelium extends inward from the skin surface. These are most likely found on the orbital ridge where they present as a nontender, mobile, subcutaneous nodule near the eyebrow. When localized to this region, there is no deep extension and thus they can be removed without any radiographic imaging. However, 3% of dermoids are found in the nasal midline area and are associated with central nevous system communication. It is important to send these cases for radiographic imaging (*e.g.,* ultrasound or computed tomography) prior to any invasive procedures.

This is unlikely a lipoma, which usually occurs at or after puberty. They are common benign tumours made up of mature adipose cells (they feel rubbery or putty-like) and are usually found in the subcutaneous tissues of the neck, shoulders, back and abdomen.

Mastocytomas are a common form of childhood mastocytosis, which refers to the accumulation of mast cells in the skin and other organs. They present at birth or during infancy and appear as solitary or multiple flesh-coloured to tan papules or plaques on the arms, neck and trunk. They often have an orange peel-like surface and Darier's sign (firmly stroking the lesion induces edema and erythema) is often positive. A history of blistering or urtication is common.

Pilomatricomas are benign calcified tumours originating from the hair matrix and present as a solitary papule or papulonodules of the face, neck, upper trunk, or upper extremities. They are flesh to white in colour and may have an associated pink to blue hue. They feel very firm and hard to touch and have a positive teeter-totter sign (pressure to one end of the lesion causes the other end to pop upward). When the overlying skin is held taut, the lesion appears like a tent (tent sign).

Hemangiomas of infancy are benign soft tissue vascular growths common in childhood and may involve any part of the body. They appear bright red to scarlet in colour and have a plaque-like, nodular or tumoural morphology.

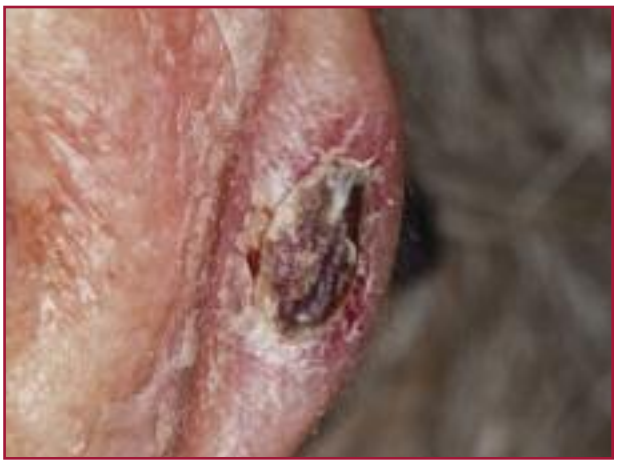
Joseph M. Lam, MD, is a Pediatric Dermatologist practicing in Vancouver, British Columbia.

Ka Wai Yam is a Final-Year Family Medicine Resident at the University of Calgary, Calgary, Alberta.

Case 3

Crusted Papule

A 76-year-old female presents with a tender crusted papule with no infiltration on the left helix of her ear that has been gradually enlarging. She has a past history of basal cell carcinoma on her lip.



What is your diagnosis?

a. Basal cell carcinoma
b. Squamous cell carcinoma
c. Chondrodermatitis nodularis helicis
d. Actinic keratosis

Answer

Actinic keratosis (AK) **(answer d)** are precancerous lesions in which there is dysplasia of the epidermis usually caused by prolonged and repeated sun exposure. One case of squamous cell carcinoma has been estimated to occur in 1,000 AK every year.

They are precancerous lesions in which there is dysplasia of the epidermis usually caused by prolonged and repeated sun exposure.

Lesions are characterized by rough, dry, scaling papules or plaques. They can have skin-coloured, yellow-brown, or brown pigmentation and often have an erythematous border or tint. They usually develop on the sun exposed skin such as:

- the face,
- temples,
- vermilion,
- ears,
- neck,
- forearms,
- hands and
- shins.

AK remain for years and can disappear spontaneously. AK can be prevented by avoiding sun exposure or by using UVB/UVA sunscreens. Treatment options include:

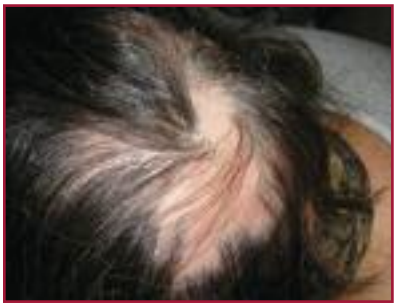
- cryosurgery,
- 5-fluorouracil cream 5%,
- imiquimod,
- topical retinoids,
- laser surgery and
- photodynamic therapy.

Amanda N. Webb, BScH, is a Research Assistant, Division of Dermatology, Department of Medicine, Dalhousie University, Halifax, Nova Scotia.

Richard G. B. Langley, MD, FRCPC, is a Dermatologist, Professor and Director of Research, Division of Dermatology, Department of Medicine, Dalhousie University, Halifax, Nova Scotia.

Case 4

Enlarging Bald Spots



A 52-year-old female presents with bald spots on her scalp which seem to be increasing in size. There was initially mild pruritus which is no longer present. She has a history of thyroid disease and diet-controlled diabetes.

What is your diagnosis?

a. Anagen effluvium
b. Androgenetic alopecia
c. Cicatricial alopecia
d. Telogen effluvium
e. Alopecia areata

Answer

Alopecia areata (AA) **(answer e)** is an autoimmune, non-scarring (hair follicles intact) condition resulting in bald patches of hair loss that can affect the scalp, eyebrows, eyelashes and even the entire body. The main patterns of AA that have been described are:

- localized (most common),
- alopecia totalis (loss of most scalp hair),
- alopecia universalis (loss of most scalp and body hair) and
- ophiasis pattern (bandlike pattern along periphery of temporal and occipital scalp).

For unknown reasons, the immune system attacks the hair bulb region resulting in hair loss. The hair loss is usually asymptomatic, but occasionally pruritus is noted. Nail changes (*e.g.,* pitting, onycholysis, ridging) are noted in 10% to 20% of cases. Other immunologic diseases have been associated including:

- thyroid disease,
- atopy,
- vitiligo,
- pernicious anemia and
- Addison's disease.

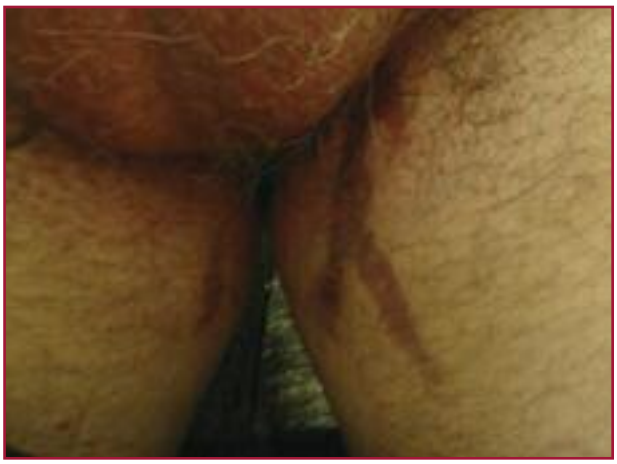
Hair can spontaneously regrow in many cases, though recurrences of this condition are also common. Localized disease is often treated with potent topical steroid lotions or intralesional steroids (every four to six weeks). More extensive involvement may warrant adjunctive topical minoxidil, topical immunotherapy (*e.g.,* diphenylcyclopropenone applied weekly), phototherapy, prednisone or cyclosporine.

Benjamin Barankin, MD, FRCPC, is a Dermatologist practicing in Toronto, Ontario.

Case 5

Itchy Groin

This 41-year-old male has had a chronic itch of the groin area for several years before it abated with the use of a topical steroid cream. With time he noted changes in the treated areas.



What is your diagnosis?

a. Candidiasis
b. Steroid atrophy
c. Tinea incognito
d. Striae distensae
e. Psoriasis

Answer

Steroid atrophy **(answer b)**. Prolonged use of steroid creams can cause adverse side-effects on any part of the skin. The extent of the side-effects will be influenced by the strength of the steroid, the area treated, duration of the therapy and to some degree individual sensitivity. Certainly most occluded areas such as the axilla, inframammary areas and in this case groin folds are at greater risk.

Quite often individuals are so pleased with the success of therapy in relieving symptoms that they, despite warnings to the contrary, continue steroid applications for fear of a recurrence of these symptoms. Unfortunately, with time when they do try to stop or reduce rate of applications the symptoms recur even more so than previously, hence the tendency to continue applications.

With time there is epidermal atrophy, skin fragility and purpura and dilated vessels, which persist with slow involution of colour.

Treatment involves behaviour modification to wean patients from the self-destructive use of topical steroids, which has become habitual. Strength and frequency of application have to be reduced and substituted by calcineurin inhibitors as well as lubricating creams and oral sedations such as doxepin especially at night.

Colour does fade with time but can be hastened by use of a pulsed dye laser. The epidermal atrophy, however, persists.

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

Case 6

Perineal Rash

A two-year-old boy presents with a well-demarcated perineal rash, confluent from the anus onwards.

What is your diagnosis?

a. Anal fissure
b. Crohn's disease
c. Perianal streptococcal dermatitis
d. Psoriasis

Answer

Perianal streptococcal dermatitis (PSD) **(answer c)** (also known as perianal cellulitis, perianal streptococcal cellulitis and streptococcal perianal disease) is caused by group A β-hemolytic streptococcus. The disease is characterized by sharply circumscribed perianal erythema. The lesion is very tender and may be associated with:

- rectal discomfort,
- rectal itching,
- painful defecation and
- blood-streaked stools.

Fever and systemic symptoms are unusual. Streptococcal pharyngitis may be concomitantly present. Perianal streptococcal dermatitis may be complicated by post streptococcal pharyngitis and guttate psoriasis. Treatment consists of a 10 day course of oral penicillin.

Alexander K. C. Leung, MBBS, FRCPC, FRCP (UK and Ire), is a Clinical Associate Professor of Pediatrics, University of Calgary, Calgary, Alberta.

Justine H. S. Fong, MD, is on staff at the Asian Medical Clinic, an Affiliate with the University of Calgary Medical Clinic, Calgary, Alberta.