This month – 7 cases:

Case 1

Yellow Spots on the Penis

This 18-year-old male has had longstanding static yellow spots on his penis. He is not sure of its duration. He is in a monogamous relationship but his male partner was concerned about the possibility of an STI and wanted him to be formally assessed by a physician.

On examination, he is pleasant but somewhat anxious. Numerous soft, yellow papules measuring 1 mm to 3 mm in diameter are noted on the shaft of the penis. The surfaces of the lesions are smooth and dome-shaped without a central dell.

What is your diagnosis?

a. Genital warts (HPV infection)
b *Molluscum contagiosum* (pox virus)
c. Primary syphilis
d. Fordyce spots
e. Balanoposthitis

Answer

Fordyce spots (FS) **(answer d)** or Fordyce condition is a benign, physiologic phenomenon characterized by ectopic sebaceous glands. Usually, sebaceous glands are associated with hair follicles. Typical locations include the lips, buccal mucosa and genitalia. FS are not associated with any illness, however, the appearance may cause anxiety and even consternation for some patients. Unfounded fears include STI and malignancy. The diagnosis is based on clinical appearance. Infrequently, a skin biopsy may be indicated to confirm diagnosis. Simple reassurance is the rule and active treatment is not advised. However, the visit provides an excellent opportunity to counsel patients on the importance of safer sexual practices and STI prevention. Some authors propose topical treatment such as tretinoin cream or chemical peels. Destructive procedures such as ablative laser, electrodescication or cryotherapy may be attempted for insistent patients on a cosmetic basis.

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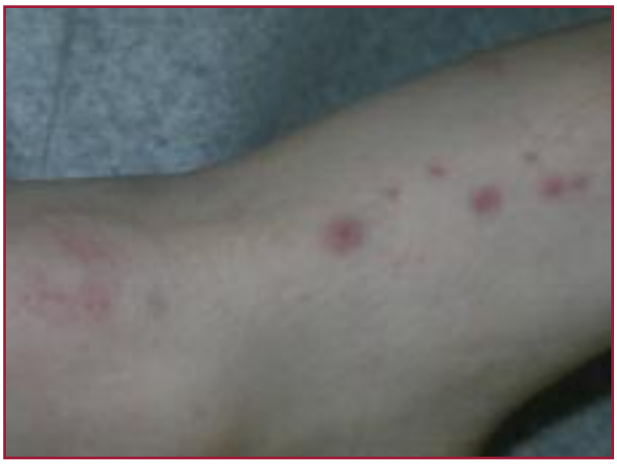
Case 2

Leg Sores

A seven-year-old boy presents with non-blanching, raised, purplish papules on both his lower extremities. He also complains of mild abdominal discomfort and a swollen left knee. These symptoms are preceded by a sore throat.



What is your diagnosis?

a. Urticarial vasculitis
b. Juvenile rheumatoid arthritis
c. Henoch-Schönlein purpura
d. Kawasaki disease

Answer

Henoch-Schönlein purpura (HSP) **(answer c)** is an IgA-mediated systemic vasculitis that affects mainly small vessels with a predilection for the skin. It occurs mainly in children, particularly those between four- and seven-years-of-age. HSP is the result of a leukocytoclastic vasculitis mediated by an antigen-stimulated increase in levels of IgA, subsequent deposition of IgA antigen complexes in the vasculature of involved organs and activation of complement pathways. HSP is characterized by an acute onset of cutaneous involvement in the buttocks and the lower extremities. The lesions usually begin as erythematous papules and macules and then progress to crops of non-thrombocytopenic, non-blanchable, palpable purpura. These lesions generally resolve within one to two weeks.

Migratory or transient arthralgia and arthritis can occur, particularly in the joints of the lower extremities. GI symptoms can range from mild abdominal pain with or without nausea and vomiting to more serious types, including bowel ischemia and intussusception. Renal involvement is usually mild, with microscopic hematuria being the most likely presentation; however, serious renal impairment does occur in a small number of patients. Nephropathy is more severe in children over eight-years-of-age.

Most cases of HSP are self-limiting. Simple supportive care, such as proper hydration, optimal nutrition, rest and analgesia, is helpful. In children with renal involvement, a low-salt diet helps to minimize the possibility of hypertension. The use of corticosteroids is controversial. However, prednisone should be considered for patients with severe GI or renal involvement.

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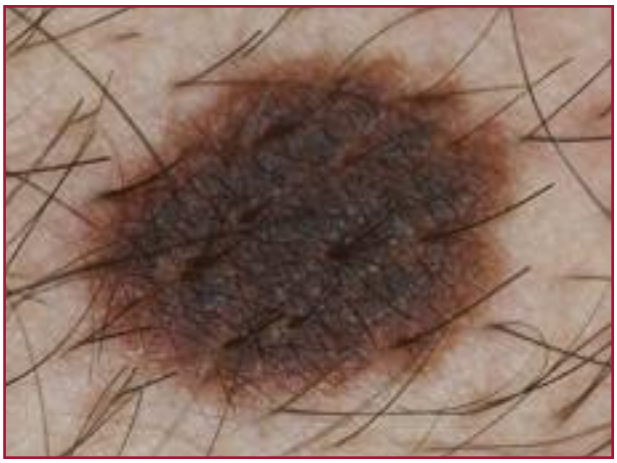
Case 3

Dark Brown Plaque

A 50-year-old male presents with a dark plaque measuring 1.2 cm by 0.8 cm on his mid-back that has variegations in colour. The pigmentation and size of the plaque have been changing for approximately a year.



What is your diagnosis?

a. Cutaneous melanoma
b. Basal cell carcinoma
c. Dysplastic nevus
d. Lentigo maligna

Answer

Cutaneous melanoma **(answer a)** results from the malignant transformation of melanocytes in the epidermis or dermis. It is a potentially lethal and increasingly frequent malignancy in persons with white skin, representing 5% of all cancers in males and 4% in females. Melanoma can be identified by the following five clinical features or ABCDE's:

- **A**symmetry in shape
- An irregular **B**order
- Variegations in **C**olour, a **D**iameter > 6 mm and elevation and **E**nlargement

Those who are at the greatest risk of developing cutaneous melanoma have some, or several of the following phenotypic characteristics:

- light skin pigmentation,
- prone to sunburns,
- a family history of melanoma or prior history of melanoma,
- blue-green eyes, freckles, blond or red hair and
- melanocytic nevi present.

There is also a strong correlation between the incidence of cutaneous melanoma and individuals who have had blistering sunburns before 14-years-of-age. Immediate excision should be performed if melanoma is suspected. A complete excision with narrow margins is the biopsy method of choice.

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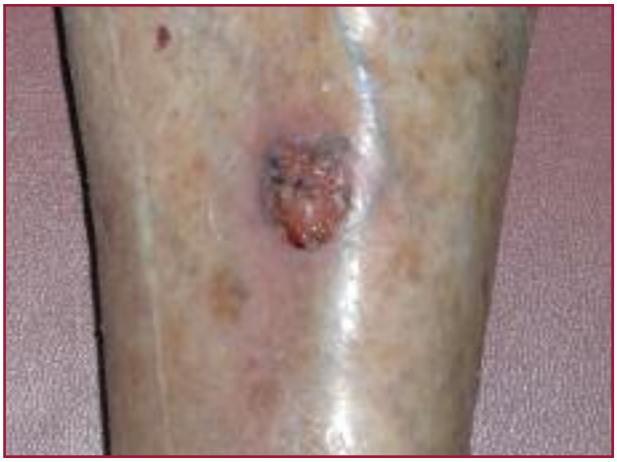
Case 4

Growing Abrasion

This 82-year-old gentleman presented with this quickly enlarging lesion, which started growing 12 months ago. He worked as a sailor in Australia for about 30 years, where he used to wear shorts on most occasions. His diagnosis was reached after a biopsy.



What is your diagnosis?

a. Keratoacanthoma
b. Irritated seborrheic keratosis
c. Basal cell carcinoma
d. Squamous cell carcinoma

Answer

Squamous cell carcinoma (SCC) **(answer d)** is a malignant tumour arising from keratinocytes with potential for local spread and metastasis.

The main factor causing it is UVB exposure but there are many other factors including HPV (certainly Types 16 and 18; other implicated include 31, 33 and 38), radiation therapy, arsenic exposure, chemical carcinogens (tar, pitch) and immunosuppression (iatrogenic, HIV/AIDS).

They usually present as a hyperkeratotic papule or plaque, often with crust or ulceration that is difficult to separate from original lesions. Growth rate and risk of metastasis are highly variable. Outlook is best for lesions on skin arising from actinic keratosis (AK) and is worst for the lips, penis and vulva.

Excision with clear histologic margins is the best approach, all other approaches are less than ideal and they include radiation therapy, photodynamic therapy, laser ablation and cryosurgery. Some flexibility is reasonable when treating small AK that show histologic invasion but are not clinically alarming, as their risk of spread is almost immeasurable. Utmost caution is required when treating lip or genital lesions.

Inoperable or metastatic lesions are usually treated with palliative protocols borrowed from head and neck oncology programs. Typical agents include methotrexate or cisplatin combined with doxorubicin or 5-fluorouracil.

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Case 5

Markings on the Back

A two-and-a-half-year-old young child presents with recurrent urticaria-like markings on the back for the past four months. There are no associated food allergies. The mother noted that the markings occasionally occur at sites of pressure or friction, such as the waist. The lesions resolve completely within 20 minutes. When present, the markings are asymptomatic. On physical examination, stroking of the back reproduces the findings.

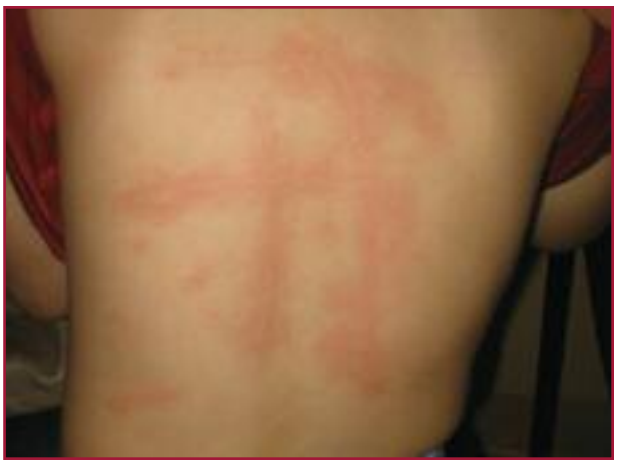
What is your diagnosis?

a. Mastocytosis
b. Dermatographism
c. Chronic urticaria
d. Urticaria pigmentosa
e. Child abuse

Answer

Dermatographism **(answer b)** produces a sharply localized edematous or wheal reaction with surrounding erythema at a site within seconds from firm stroking. The wheal typically persists for 15 minutes. The phenomenon is often seen in infants, occurs in approximately 50% of children and is found in 1% of adolescents or adults. Treatment is not necessary.

Mastocytosis in children presents with a reddish-brown or *peau d'orange* appearance and patients may experience intense pruritus, flushing, diarrhea, abdominal pain and respiratory distress. Urticaria pigmentosa is the most common presentation of mastocytosis. Multiple, well-demarcated, tan to red-brown papules and macules may emerge anywhere on the body, with palms and soles usually spared.



Darier's sign (edematous, pruritic, erythematous skin following stroking of the skin) is positive and unique to mastocytosis and urticaria pigmentosa. Lesions from chronic urticaria persist for more than six weeks. Child abuse may produce similar markings with use of a corresponding-sized object. However, child abuse would produce bruising and possible cicatricial changes.

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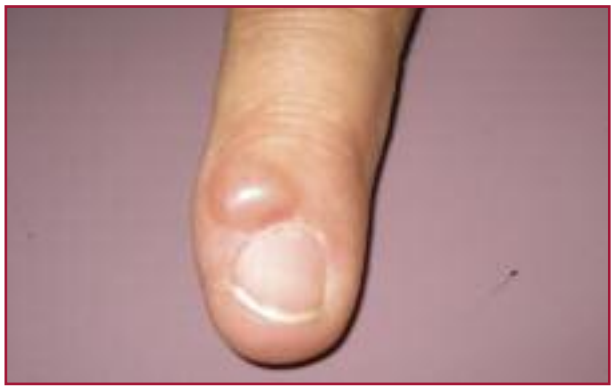
Case 6

Bump on the Index Finger

A 55-year-old female presents with a cystic mass on her index finger distal interphalangeal joint which has resulted in a nail groove deformity.



What is your diagnosis?

a. Ganglion cyst
b. Digital mucous cyst
c. Epidermoid cyst
d. Milia cyst
e. Fibroma

Answer

This patient has a Digital mucous cyst **(answer b)** which is a benign, cystic mass commonly located on distal interphalangeal joints or at the proximal nail fold. They are more common on the hands, but can appear on the toes as well. Usually these lesions are asymptomatic, but occasionally can cause some pressure and/or discomfort. It is believed that these mucous cysts form due to mucoid degeneration of connective tissue most likely associated with osteoarthritis. Women are more commonly affected and typically patients present in the fifth decade and beyond.

The most common treatment involves periodic needling of the cyst with a wide-bore needle and extrusion of the viscous content which eventually results in scarification and resolving of the lesion. Sometimes, liquid nitrogen or electrocautery is a useful adjunct and/or intralesional Triamcinolone topical. Surgical excision can also be employed, though recurrence with any treatment modality is not uncommon.

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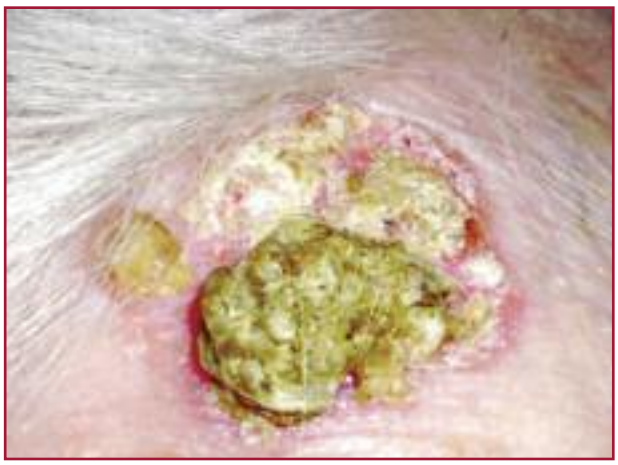
Case 7

Forehead Growth

A 98-year-old woman presents with a crusted lesion located on her forehead. The problem started seven years ago. At first, a small, white, asymptomatic papule appeared, after the small nodular lesion extended peripherally in an irregular pattern. A few years later, the centrum of the lesion ulcerated and crusted. The lesion extended peripherally and became deeper, but never healed. It bleeds on occasion.



What is your diagnosis?

a. Keratoacanthomas
b. Malignant melanoma
c. Squamous cell carcinoma
d. Basal cell carcinoma

Answer

Basal cell carcinoma (skin cancer) **(answer d)** is currently the most commonly diagnosed cancer in Canada. The skin cancer can be divided into two forms: non-melanoma, which includes basal and squamous cell carcinoma and malignant melanoma. Basal cell carcinoma is the most common form of skin cancer and least likely to metastasize, but it can be very destructive locally. The most important risk factors is sun exposure. Other risk factors are:

- fair skin,
- genetic,
- chronic dermatitis and
- xeroderma pigmentosum.

The most common sites are:

- face,
- ears and
- arms.

If numerous areas of white scarring appear within the nodule, the sclerosing (morpheaform) type of basal cell carcinoma can be diagnosed. Our patient underwent biopsy which showed basal cell carcinoma but she did not agree for any treatment. Treatment depends on the type of basal cell carcinoma. Tumours around the nose, eye and ear require management by experts, such as a dermatology surgeon capable of performing Mohs surgery. Radiotherapy is also an option.

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