A Painless Lump on the Wrist

HK is an 82-year-old gentleman who presents for his first physical with his new doctor after his former doctor retired. He requests an opinion regarding a painless lump, which he has had for many years.

What is your diagnosis?

a. Ganglion
b. Neuroma
c. Lipoma
d. Chondroma

Answer

Ganglion (answer a) (digital mucous cyst) is a benign cyst arising from the joint capsule or tendon consisting of a fibrous capsule that contains mucinous material. It can be viewed as a herniation of synovial tissue.

A true ganglion cyst is a soft tissue lesion that occurs most commonly around the wrist area.

Ganglion cysts are usually removed by orthopaedic or hand surgeons, should a patient request removal; however, most patients decide not to undergo surgery after reassurance of their condition’s benign nature.

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 General Practitioner in Mississauga, Ontario.
An eight-week-old male presents with a history of recurrent, itchy pustules over the palms and soles that have been there since this infant was two-weeks-of-age.

**What is your diagnosis?**

a. Acropustulosis of infancy  
b. Eosinophilic pustular folliculitis  
c. Transient neonatal pustular melanosis  
d. Erythema toxicum neonatorum

**Answer**

The answer is acropustulosis of infancy (answer a). This disorder is characterized by recurrent episodes of intensely pruritic pustules and papulovesicles on the hands and feet. They are usually most concentrated on the palms and soles, but they may be seen on the dorsal aspect of the hands, feet, wrists, and ankles. Occasional lesions appear on the face and scalp. Its onset is usually between birth and two-years-of-age. Individual episodes last for 7 to 10 days and may recur as often as every two weeks and tend to become less frequent and severe over time. The disease resolves spontaneously by two- to three-years-of-age, but symptomatic treatment is with high-potency topical corticosteroids. The etiology of the disease is unclear, but it may be seen after scabies infection in infants (postscabies syndrome).

Eosinophilic pustular folliculitis is a rare dermatosis of unknown cause. It is characterized by erythematous patches of follicular papules and yellow or white pustules, which vary in size from 1 to 3 mm. Most lesions are located on the scalp and distal extremities. A Tzanck smear may reveal numerous eosinophils, and there may also be a peripheral eosinophilia when flaring.

Transient neonatal pustular melanosis is a benign, self-limiting disorder of unknown etiology characterized by superficial vesiculopustular lesions that rupture easily and evolve into hyperpigmented macules.

Erythema toxicum neonatorum is a benign, self-limiting condition that affects full-term newborns. Lesions appear as erythematous macules, within which papules and pustules may develop, and these often affect the trunk. All other body sites can be involved, but usually the palms and soles are spared. It resolves spontaneously within 10 days.

Naomi Bradley is a Final Year Medical Student at the University of Leicester in the United Kingdom.

Joseph M. Lam, MD, FRCPC, is a Clinical Assistant Professor of Pediatrics and Associate Member of the Department of Dermatology and Skin Sciences at the University of British Columbia.
A four-year-old girl presents with darkened, infraorbital circles. She has a history of atopic dermatitis, allergic rhinitis, and asthma.

**What is your diagnosis?**

a. Neuroblastoma  
b. Bruises  
c. Allergic shiners  
d. Angioedema

**Answer**

Allergic shiners *(answer c)* are characterized by infraorbital edema and darkening. They are commonly seen in patients with active allergic rhinitis. The pathophysiology is thought to be due to edema of the nasal cavity mucous membrane, which compresses the veins involved in draining blood from the infraorbital region, resulting in the stasis of venous blood flow. Other causes of shiners may be inflammatory diseases of the conjunctiva, trauma to the forehead or nose, previous history of facial surgery, malignancy, cystic fibrosis, ciliary dyskinesia syndromes, nasal polyposis, chronic rhinosinusitis, and non-allergic rhinitis. However, the term allergic shiner is reserved for patients whose cause is due to allergic rhinitis. Hence, a detailed history and physical is required to rule out these other causes. The darkness and the size of the discolourations observed under the orbits often correlate with the severity and the duration of the allergic rhinitis.

Treatment of allergic shiners is accomplished through the management of the allergic rhinitis. Nonpharmacological treatments for allergic rhinitis include allergen avoidance through use of air filtration systems (HEPA/electrostatic filters) and keeping windows closed. Mild cases of allergic rhinitis can be managed with either an oral antihistamine or an intranasal corticosteroid alone. More severe cases may require treatment with a nasal corticosteroid in combination with various agents, such as an oral/nasal spray antihistamine, decongestant, anticholinergic agent, or leukotriene receptor antagonist.

Collin Luk, BHSc, is a Medical Student at the University of Calgary in Calgary, Alberta.

Alexander K.C. Leung, MBBS, FRCP, FRCPC(UK&Irel), FRCPCCH, is a Clinical Professor of Pediatrics at the University of Calgary in Calgary, Alberta.
A 43-year-old lady presents complaining of a “pimple” on her lip of two-days duration, along with pain and swelling. She denies having had any similar lesions in the past. She reports feeling tired, but denies any fever or cold symptoms. Upon examination, she does not have any other skin or mouth lesions.

What is your diagnosis?

a. Aphthous stomatitis
b. Herpes labialis
c. Hand, foot, and mouth disease
d. Erythema multiforme

Answer

Herpes labialis (answer b), frequently referred to as a cold sore or fever blister, is a common infection caused by the herpes simplex virus, most commonly type 1 (HSV-1). Most patients with primary infections are asymptomatic; however, some individuals may present with erythema followed by overlying single or multiple vesicles. The vesicles tend to be fragile and can easily break. Patients may also experience fever, headache, and malaise, which usually resolve within seven days of symptom onset.

The majority of the population, approximately 85%, has been infected with HSV-1. These individuals may experience recurrent infections, which are characterized by a prodrome of a tingling, itching, or burning sensation that occurs 24 hours before visible lesions.

The diagnosis is most often made clinically, and it may be confirmed with a Tzanck smear, viral culture, or an antigen detection method.

Management consists primarily of hygiene and patient education. The individual should be advised that the infection is self-limited but highly contagious, and that skin-to-skin contact should be avoided during the outbreak. Topical antiviral therapy, such as acyclovir 5% ointment, is approved but has limited efficacy. Oral antivirals are the drugs of choice for genital herpes infections, and may also be used for moderate-to-severe nongenital lesions.

Kimmy Goyal, MD, CCFP, ABFM, is a Family Doctor in Brampton, Ontario.

Ankush Goyal, MD, ia a First Year Family Medicine Resident at Indiana University Methodist Hospital in Indianapolis, Indiana.
A 53-year-old, white female presents with a three-week history of a diffuse, pruritic skin eruption that is resistant to treatment with clotrimazole cream prescribed by her primary care physician.

What is your diagnosis?

- Erythema chronicum migrans
- Ringworm infections
- Discoid eczema
- Psoriasis

**Answer**

Ringworm infections (answer b) (tinea cruris or corporis), commonly called ringworm of the body, is an itchy rash that is usually characterized by a red and inflamed ring that surrounds healthy looking skin, although it can also appear as a flat, round patch. Usually, it only affects the skin’s outer layer; however, ringworm may develop as a single rash or as multiple, or overlapping rashes. Ringworm is the name used for infection of the trunk, legs, or arms with a dermatophyte fungus.

In different parts of the world, different species cause ringworm. In New Zealand, *Trichophyton rubrum* is the most common cause. Infection often originates from the feet (tinea pedis) or nails (tinea unguium). *Microsporum canis* originates from cats and dogs, and *Trichophyton mentagrophyte* comes from farm cattle; these are also common. Tinea cruris is a subacute or chronic dermatophytosis of the upper thigh in males, mostly caused by *Epidermophyton floccosum* or *Trichophyton rubrum*. The classic presentation of tinea an annular, scaly plaque with an erythematous border and central clearing. However, various presentations exist. The diagnosis of ringworm is confirmed by microscopy and culture gathered from skin scrapings.

Treatment for minor fungal infections involves topical treatments (terbinafine), but widespread involvement requires systemic therapy (terbinafine 250 mg daily and itraconazole 100 mg daily, may be used for ringworm).
A one-month-old boy presents with diffuse scaling and crusting of the scalp. The lesion was first noted at two-weeks-of-age. He also has an erythematous rash in the diaper area. The infant is asymptomatic.

**What is your diagnosis?**

a. Infantile seborrheic dermatitis  
b. Atopic dermatitis  
c. Psoriasis  
d. Langerhans cell histiocytosis X

**Answer**

Infantile seborrheic dermatitis *(answer a)* usually develops within the first month of life. Infants with seborrheic dermatitis often present with focal or diffuse scaling and crusting of the scalp. Not uncommonly, erythematous or salmon-coloured, sharply demarcated patches with yellow-white scales may involve the face, postauricular areas, trunk, and intertriginous and flexural areas of the body. In the diaper area, infantile seborrheic dermatitis presents as a sharply demarcated, erythematous, scaly eruption with a tendency to coalesce, resulting in the formation of a large confluent lesion. Pruritus is characteristically absent. The condition affects approximately 45% of infants with the highest prevalence in those younger than three-months-of-age. Infantile seborrheic dermatitis usually responds to simple emollients. Scalp lesions may require the use of nonprescription, mild shampoos. If the above measures fail, the use of a topical low-potency corticosteroid and/or ketoconazole cream should be considered.

Infantile seborrheic dermatitis is distinguished from atopic dermatitis by its earlier age of onset, involvement of the scalp, diaper area, and flexural rather than extensor surfaces, well-defined lesions with dry, fine scaling, and the absence of oozing, weeping, and pruritus.

In infants and young children, psoriasis often presents as sharply demarcated, erythematous plaques in the diaper and intertriginous areas. The classic silvery scales are usually absent.

Langerhans cell histiocytosis X is a multisystem disease, which can be distinguished by the presence of 1 to 3 mm, discrete, yellowish to red-brown crusted papules, purpuric lesions, lymphadenopathy, and hepatosplenomegaly.

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

Collin Luk, BHSc, is a Medical Student at the University of Calgary in Calgary, Alberta.
This 51-year-old patient with a known history of melanoma with regional lymph node metastases, presents with a changing lesion on his right flank. This lesion has been present for several years and has begun to bleed and change over the past few days.

**What is your diagnosis?**

a. Metastatic melanoma  
b. Melanoma  
c. Squamous cell carcinoma  
d. Irritated seborrheic keratosis

**Answer**

This patient has irritated seborrheic keratosis (answer **d**). The history of a new or changing lesion should always be interpreted with caution, as melanoma and nonmelanoma skin cancer can present in this way. In addition, a patient with a prior history of melanoma and a new, changing lesion would raise the possibility of a local cutaneous metastasis. It is always important to pay attention to the specific history of change; a change that occurs over a period of a few days or as a response to trauma, for example, may be due to a benign process. Typically, changes that are particularly suspicious are those with a sustained change, occurring over many months. In addition, the change in morphology (asymmetry, border irregularity, colour variegation, diameter change) may be helpful for a diagnosis of melanoma. In this case, although the clinical diagnosis is of a benign lesion, an excision was performed for diagnostic and therapeutic purposes.

Richard Langley, MD, FRCPC, is a Professor of Dermatology and Director of Research in the Division of Dermatology at Dalhousie University in Halifax, Nova Scotia.