Test your knowledge with multiple-choice cases

This month - 6 cases:

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Case 1

Oval Vesicles on Hands and Feet

An 11-year-old male presents with small oval vesicles on an erythematous base affecting his hands and feet. He has recently felt unwell.

What is your diagnosis?

- a. Irritant contact dermatitis
- b. Allergic contact dermatitis
- c. Scabies
- d. Bullous pemphigoid
- e. Hand, foot and mouth disease

Answer

Hand, foot and mouth disease (answer e) is most commonly due to coxsackievirus A16 or enterovirus 71. This highly contagious infection has an incubation period of three to six days. It presents as oval shaped vesicles with erythematous halos on the mouth, palms and soles. Management is for symptoms only and predominantly for reassurance. Epidemics tend to occur every three years in North



America, and transmission is by direct contact with nasal/oral secretions, fecal material or aerosolized droplets.

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Nail Abnormality

A 32-year-old male presents with scaling erythema on his scalp, medial eyebrows, and post auricular area, and more recently his fingernails have become rough and discoloured.

What is your diagnosis?

- a. Nail psoriasis
- b. Onychomyoses
- c. Trauma
- d. Lichen planus

Answer

This patient has nail psoriasis (answer a), one of the many clinical manifestations of psoriasis. It is estimated that nail psoriasis occurs in up to 50% of patients with psoriasis. The typical nail abnormality seen with psoriasis is "pitting" of the nail plate. This finding is thought to be caused by psoriatic involvement of the nail matrix, causing abnormal nail plate growth. Additional nail findings in patients with psoriasis include: onycholysis, splinter hemorrhages, subungual debris, oil spot lesions and nail dystrophy. Nail psoriasis has been frequently associated with psoriatic arthritis.

Unfortunately, nail psoriasis is refractory to most topical treatments. However, topical corticosteroids,



tazarotene, or a combination of topical steroids and calcipotriol may be successful in certain cases. Systemic therapy may be effective in treating nail psoriasis, but the risk-benefit does not typically justify the use of this treatment for nail disease alone. Another option is subungual glucocorticoid injections; however, they are painful and tolerated by few patients.

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Congenital Patch

A healthy, 17-month-old male presents with a congenital dark brown pigmented patch on his left thigh. It is increasing in size and dark hair has recently been observed to be growing from it.

What is your diagnosis?

- a. Acquired melanocytic nevus
- b. Café au lait spot
- c. Congenital nevomelanocytic nevus
- d. Melanoma

Answer

Congenital nevomelanocytic nevus (answer c). Approximately one to two percent of infants will present with congenital nevomelanocytic nevi (CNN). Usually the nevi are present at birth, but rare varieties may only become apparent later on in infancy. The nevi can be small (<1.5 cm), medium (1.5 to 20 cm), or giant (>20 cm) and may involve an entire body segment (garment nevi). Typically, they range in color from light tan to black and can have regular or irregular borders. It is not uncommon for dark terminal hair follicles to be present throughout the nevus. As the child grows, the CNN will increase in area and will likely become elevated. The risk of melanoma is correlated with the size



of the CNN, with giant CNN having approximately a 5% lifetime risk of malignant degeneration. As the child grows, the CNN should be monitored as the child grows for changes in symmetry, borders, colour and size (ABCDs). If the CNN develops any abnormalities that were not present at birth, the child should be referred to a dermatologist for further management.

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Skin Infection

A three-year-old boy presents with a honey-crusted plague over the right corner of the lips. What is the diagnosis?

What is your diagnosis?

- a. Perleche
- b. Periorificial dermatitis
- c. Iron deficiency
- d. Irritant contact dermatitis
- e. Impetigo

Answer

Impetigo (answer e) is a common, contagious superficial skin infection caused by streptococci, staphylococci, or both. The disease is most commonly seen in infants and children. The lesions most frequently occur on exposed parts of the body including the face, hands, neck and extremities. There are two classic forms of impetigo, bullous and nonbullous (or crusted), as seen above, with nonbullous comprising the majority of cases. Nonbullous impetigo begins with erythematous papules or pustules that quickly develop into vesicles. These vesicles rupture easily and release thin, cloudy yellow fluid that dries, forming a honeycoloured crust, the hallmark of impetigo. The infection is easily spread by autoinoculation through fingers, towels, or clothing. Untreated, impetigo may last for two to three weeks, with continuous spread and development of new lesions. Gentle cleansing, warm compresses for removal of crusts, and drainage of blisters and pustules may help prevent local spread of disease. Topical antibiotics may be useful in the treatment of mild, localized disease due to S. aureus. With streptococcal or more severe staphylococcal infections, systemic antibiotics are recommended.

This lesion is unlikely to be periorificial dermatitis, which is an acne-like eruption on the perioral and periocular skin. Periorificial dermatitis manifests as discrete erythematous papules that often coalesce, forming plaques. It is not characterized by



the honey-coloured crusting that is seen in this case. The etiology of periorificial dermatitis is unknown, but may be associated with the use of mid to high potency topical corticosteroids. It is generally selflimited, although resolution may take months to vears.

Contact irritant dermatitis (lip-licker's dermatitis) often occurs in children as a result of a licking habit. Saliva also becomes trapped between the thumb and mouth of thumb-suckers, and a similar reaction is seen in toddlers who use pacifiers for long periods of time. The lips and adjacent skin become dry, inflamed and irritated. It is not generally characterized by the honey-crusted plaques seen here.

This is unlikely to be perlèche, or angular cheilitis, which is characterized by fissuring and inflammation of the corners of the mouth with associated maceration and exudate. This condition appears to be related to moisture collecting at the mouth angles, and is not associated with nutritional or vitamin deficiency. Perlèche may be seen in conjunction with dental malocclusion, the presence of orthodontic appliances and lip licking.

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Eyelid Lesions

This 35-year-old woman presents with lesions on her eyelids.

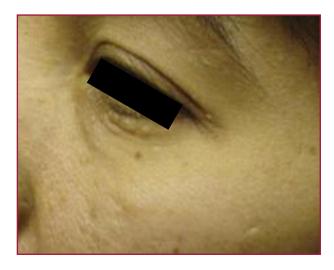
What is your diagnosis?

- a. Papillomata
- b. Xanthelasmata
- c. Verrucae
- d. Hidrocystoma
- e. Syringomata

Answer

Syringomata (answer e) are very common growths derived from sweat glands. They are usually multiple. Besides the eyelids, they may occur on the forehead, cheeks, penis and vulva. Lesions appear slowly and are asymptomatic. The eruptive subtype appear suddenly and are more common on the chest, axilla or extremities.

As lesions are benign, they can be left alone.



Treatment modalities include use of topical acids, fine electrocautery and laser dilation, but success is variable, especially when there are multiple lesions.

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

Swelling in Stomach

This gentleman was noticed to have this swelling in his yearly physical examination. It is asymptomatic and is easily reducible.

What is your diagnosis?

- a. Umbilical hernia
- b. Para-umbilical hernia
- c. Lipoma
- d. Sebaceous cyst
- e. Omphalocele

Answer

The answer is Para-umbilical hernia (answer b). In adults, most hernias in the umbilical region occur above or below a patient's umbilicus, through a weak place in the linea alba, rather than directly through the umbilicus itself. In Africa, a few of these hernias may be true umbilical ones, which may be so huge that they can accommodate a pregnant uterus.

The typical patient is an obese multiparous woman, with a large multilocular hernia in the upper part of her umbilicus. Its margins are firm, so obstruction and strangulation, particularly Richter's type strangulations of the large gut, are common.

If a para-umblical hernia is small, you should be able to repair it quite easily. Repairing a large one is difficult, because the viscera in the sac stick to its wall, and in freeing them you may damage the gut.

An umbilical hernia is a congenital malformation, especially common in infants of African descent, and more frequent in boys. It is important to distinguish this type of hernia from an omphalocele, as well as from a Para-umbilical hernia, which



occurs in adults and involves a defect in the midline near to, but not through the umbilicus.

An omphalocele is a congenital malformation in which variable amounts of abdominal contents protrude into the base of the umbilical cord. As the fetus grows during pregnancy, the intestines grow longer and project from the abdomen into the umbilical cord. This growth takes place from the sixth to the tenth week of pregnancy. Normally, the intestines return rapidly into the abdomen by the eleventh week of pregnancy. If this fails to happen, an omphalocele is present. It is important to stress to the parents that they did not do anything to cause the condition. However, more than half of all infants born with an omphalocele may have other birth defects, some of which may be serious.

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