



Illustrated quizzes on problems seen in everyday practice

CASE 1: BRUCE'S BURNING



Bruce, a 54-year-old Caucasian male, presents with a one-week history of an erythematous well-defined plaque on his right thigh. It burns, but is not itchy. He is on no medications.

Questions

1. What is the diagnosis?
2. Which strain is most likely involved?
3. How would you manage this condition?

Answers

1. Herpes simplex virus (HSV).
2. HSV Type 2 (HSV-2).
3. The lesion will regress on its own over a period of seven days to 14 days. Of modest benefit are topical antivirals. Oral antivirals, at the earliest sign, can abort or reduce the duration and the discomfort of eruption.

Provided by Dr. Benjamin Barankin, Toronto, Ontario.

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CASE 2: RANDALL'S RASH



Approximately 5% to 15% of children develop fever, lymphadenopathy and rash five days to 14 days after a MMR vaccination.

Randall, 13-months-old, presents with a generalized red rash. Two weeks before, he had received the measles, mumps and rubella (MMR) vaccination. Randall was not on any medication and had not had any new foods during the preceding week. His temperature is 38 C. He has shotty lymph nodes in the cervical and occipital regions.

Questions

1. What is the most likely diagnosis?
2. What is the significance?
3. What is the treatment?

Answers

1. Adverse reaction to MMR vaccine.
2. Approximately 5% to 15% of children develop fever, lymphadenopathy and rash five days to 14 days after a MMR vaccination. The rash might be pruritic. Arthralgia develops in approximately 3% of affected children and in up to 25% of affected post-pubertal females. Other uncommon complications include:
 - idiopathic thrombocytopenic purpura,
 - toxic epidermal necrosis,
 - hearing loss and
 - anaphylaxis.
3. The fever, rash and lymphadenopathy are self-limited. Treatment is symptomatic.

Provided by Dr. Alexander K. C. Leung; and Dr. W. Lane M. Robson, Calgary, Alberta.

CASE 3: SANDRA'S SNAPPING FINGER



Sandra has problem when trying to extend her fourth finger from the flexion position. Her finger remains stuck in the flexion position, but will occasionally make a “snapping” sound when she tries to extend it.

Questions

1. What is the diagnosis?
2. What is the cause?
3. What is the treatment?

Answers

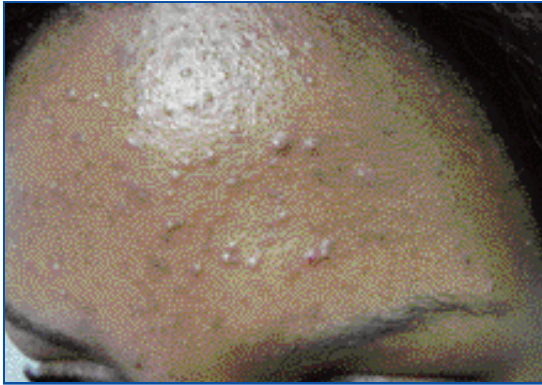
1. Trigger finger.
2. The cause of trigger finger is a localized swelling of either a flexor tendon or a flexor tendon sheath. With certain motions, this swelling causes an entrapment of the tendon.
3. Trigger finger sometimes responds to a steroid injection into the tendon sheath. If this is unsuccessful, surgical decompression is required.

Provided by Dr. Jerzy Pawlak, Winnipeg, Manitoba.

The cause of trigger finger is a localized swelling of either a flexor tendon or a flexor tendon sheath.

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CASE 4: BRITNEY'S BUMPS



The major sequelae of acne vulgaris are psychosocial effects, scarring and pain.

Britney, 24, presents with a slow-progressing eruption of papules and pustules on her forehead, with similar lesions on her back. There are lesser traces of the lesions on her cheeks.

Questions

1. What is your diagnosis?
2. What are the major sequelae?
3. Which systemic therapies would you consider?

Answers

1. Acne vulgaris.
2. Psychosocial effects, scarring and pain.
3. Systemic therapies for this condition include:
 - oral tetracycline-family antibiotics,
 - isotretinoin,
 - photodynamic therapy,
 - chemical peels,
 - oral contraceptive pill, or
 - spironolactone.

Provided by Dr. Benjamin Barankin, Toronto, Ontario.

CASE 5: LEANNE'S LESION



It is presumed that the mechanical irritation of wiping after defecation or constipation might cause the protrusion.

Leanne, 10-months-old, presents with a midline perineal protrusion, anterior to the anus. The lesion has been present for two months.

Questions

1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

Answers

1. Infantile perianal pyramidal protrusion.
2. Infantile perianal pyramidal protrusion is a relatively newly-recognized condition. Characteristically, it presents as a pyramidal protrusion with a tongue-like lip covered with a smooth, red or rose-coloured surface. The lesion is located along the midline, anterior to the anus. The exact pathogenesis is not known. It is presumed that the mechanical irritation of wiping after defecation or constipation might cause the protrusion. The condition is also more common in infants with anal fissures and lichen sclerosis. There is a preponderance of females affected.
3. The condition is self-limited, often lasting a few months. Underlying conditions, such as constipation or anal fissure, if present, should be treated.

Provided by Dr. Alexander K. C. Leung; and Dr. Justine H. Fong, Calgary, Alberta.

CASE 6: SHERRY'S SWELLING



Figure 1. Swelling under left mandible.

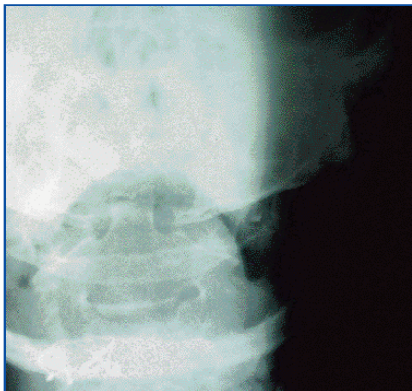


Figure 2. Anteroposterior x-ray.



Figure 3. X-ray: lateral view.

Sherry, 75, presents with sudden onset of painful swelling under her left mandible (Figure 1).

Questions

1. What is the possible diagnosis?
2. What is the differential diagnosis?
 - a) Sialadenitis
 - b) Ductal papilloma
 - c) Adenoid cyst
 - d) All the above
3. What investigation should you order first?
 - a) Fine-needle aspiration biopsy
 - b) Sialography
 - c) Radiography
 - d) Complete blood count
4. What do the x-rays show?

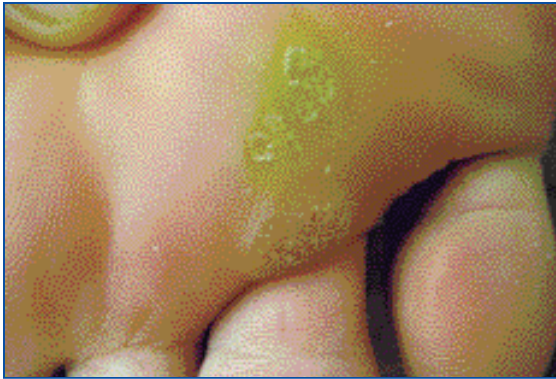
Answers

1. Sialolithiasis.
2. d) All of the above.
3. c) Radiography.
4. Anteroposterior (Figure 2) and lateral (Figure 3) views on x-ray were obtained. There is an 8 mm calcification seen in the region of the left submandibular gland within the gland or within a duct.

Provided by Dr. Jerzy Pawlak, Winnipeg, Manitoba.

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CASE 7: PAUL'S PAINFUL FOOT



Paul, 28, presents with painful lesions on his foot which have been there for several months.

Questions

1. What is the diagnosis?
2. Which subtypes of this virus are associated with malignant potential?
3. How would you manage this condition?

Answers

1. Verrucae vulgaris (Plantar warts).
2. Types 6, 11, 16, 18, 31 and 35, among others.
3. There is no easy or consistent treatment. Benign neglect can be employed as most warts will eventually resolve. Duct tape can be tried, as can over-the-counter salicylic acid preparations. For more stubborn warts, the following can be employed:
 - liquid nitrogen cryotherapy,
 - cantharidin,
 - trichloroacetic acid,
 - laser and
 - intralesional bleomycin.

There is no easy or consistent treatment for verrucae vulgaris.

Provided by Dr. Benjamin Barankin, Toronto, Ontario.

CASE 8: MARTIN'S MASS



An umbilical hernia results from imperfect closure or weakness of the umbilical ring. The condition is more common in Chinese and black infants and in premature infants than compared to term infants.

Martin, four-months-old, presents with a mass in the umbilical area. The mass increases in size when Martin cries or strains. The mass can be reduced inside the abdomen by external pressure.

Question

1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

Answer

1. Umbilical hernia.
2. An umbilical hernia results from imperfect closure or weakness of the umbilical ring. The condition is more common in Chinese and black infants and in premature infants than compared to term infants. The condition occurs with increased frequency in infants with:
 - Down syndrome,
 - congenital hypothyroidism,
 - Beckwith-Wiedemann syndrome and
 - mucopolysaccharidosis.
3. Most umbilical hernias resolve spontaneously within the first year of life. Rarely, surgery may be necessary if the hernia:
 - becomes incarcerated or strangulated,
 - increases in size after the first year of life, or
 - persists for four years or five years.Repair at age two years to three years is advocated by some surgeons if the fascial defect is > 2 cm.

Provided by Dr. Alexander K. C. Leung; and
Dr. Benny C. L. Cheung, Calgary, Alberta.

CASE 9: HARVEY'S HAIR LOSS



Harvey, a 26-year-old male, presents with a several-month history of a focally increasing area of hair loss. He is otherwise healthy.

Questions

1. What is your diagnosis?
2. What are the different subtypes?
3. How would you manage this lesion?

Answers

1. Alopecia areata.
2. The different subtypes are:
 - localized alopecia areata,
 - generalized (*alopecia totalis*, *alopecia universalis*),
 - ophiasis pattern and
 - sisaipho pattern.
3. Potent topical steroids, or preferably, intralesional steroids.

Provided by Dr. Benjamin Barankin, Toronto, Ontario.

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CASE 10: ULRIKA'S UVULA




During a routine physical examination, three-month-old Ulrika's uvula is noted to have an abnormal shape.

Questions

1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

Answers

1. Bifid uvula.
2. A bifid uvula is usually an isolated and asymptomatic defect. The palate should be carefully palpated because a bifid uvula is sometimes associated with a submucous cleft of the soft palate.
3. No treatment is necessary. 

Provided by Dr. Alexander K.C. Leung; and
Dr. W. Lane M. Robson, Calgary, Alberta.

The palate should be carefully palpated because a bifid uvula is sometimes associated with a submucous cleft of the soft palate.