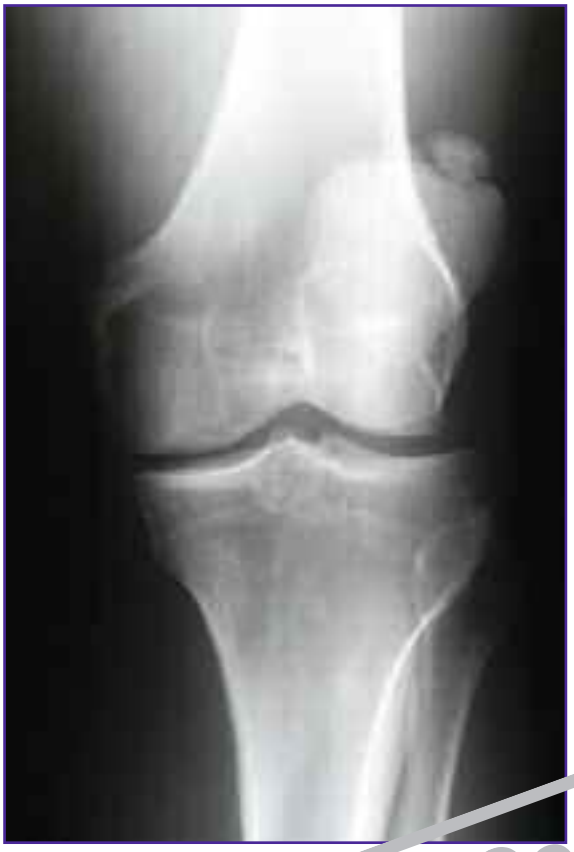
Illustrated quizzes on problems seen in everyday practice

Case 1



Nick's Knee Pain

Nick, a 35-year-old overweight male, presented with a history of recurrent left knee pain. An x-ray of his left knee (antero-posterior) was performed.

Questions

1. What does the x-ray show?
2. What is the treatment?

Answers

1. Minor degenerative narrowing of the medial femoral-tibial joint compartment is noted. An un-united ossification centre involving the supero-lateral aspect of the patella
2. Treatment involves anti-inflammatory medications, losing weight and orthopedic surgeon assessment

Provided by: Dr. J. K. Pawlak

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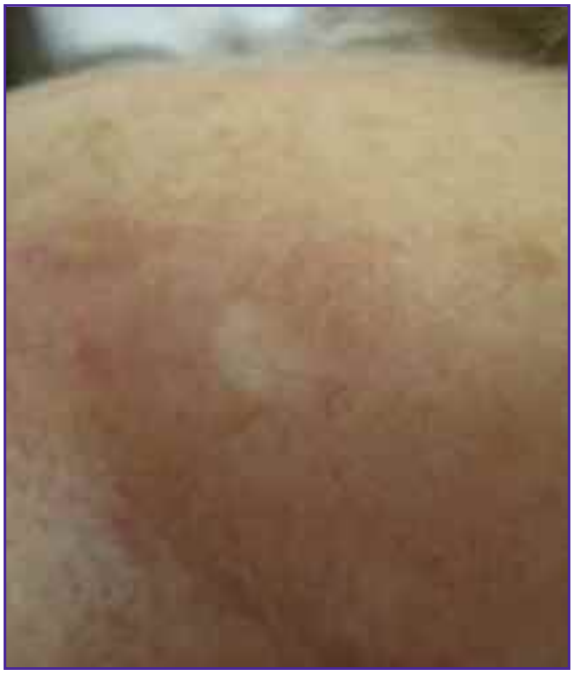
Case 2



Carla's Cheek

Carla, 68, presents with a white, firm plaque on her cheek that has been slowly expanding over a few years. It is asymptomatic.

Questions

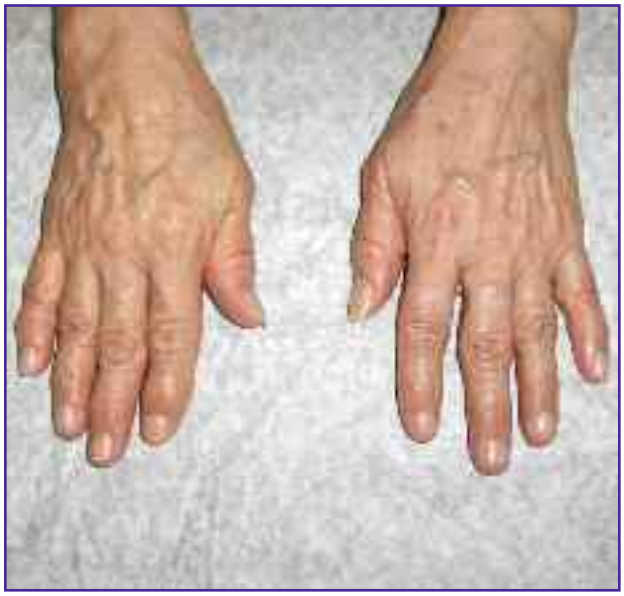
1. What is the diagnosis?
2. What are the different subtypes of this lesion?
3. How would you treat this lesion?

Answers

1. Sclerosing or morpheaform basal cell carcinoma (BCC)
2. Nodular, superficial, pigmented, cystic, micronodular and morpheaform/sclerotic
3. Mohs micrographic surgery by a dermatologic surgeon is the treatment of choice for this locally aggressive and often recurrent subtype of BCC

Provided by: Dr. Benjamin Barankin

Case 3



Gina's Joints

Gina, 65, presents with these painless lumps on the distal interphalangeal joints.

Questions

1. What are they called?
2. What is the underlying disease?
3. How to diagnose and treat the disease?

Answers

1. They are called Heberden's nodes. They are bony lumps at the distal interphalangeal joint and are associated with osteoarthritis
2. Osteoarthritis is the most common joint condition, is symptomatic three times more often in women and the mean age of onset is 50 years. It is usually primary, but may develop secondary to any joint disease or joint injury.

   The patient may complain of pain on movement (worse at end of day); background pain at rest; or stiffness and joint instability. Most commonly affected are distal interphalangeal joints, first metacarpo-phalangeal, first metatarso-phalangeal, cervical and lumbar spine, next the hip, then knee. There may be joint tenderness, derangement, with or without bony swelling (*e.g.*, Heberden's nodes), poor range of movements and effusions
3. Radiology is the way to diagnose loss of joint space, subchondral sclerosis and cysts and marginal osteophytes.

   Treatment is by simple analgesics such as acetaminophen. If the pain is very bad, give NSAIDs, recommend weight loss and consider joint replacement. There is no treatment as such for Heberden's nodes.

Provided by: Dr. Hayder Kubba

Case 4

Samantha's Scalp

Samantha, a three-week-old girl, presents with a greasy, scaly lesion on her scalp. She does not seem to be in discomfort. There is no history of chronic diarrhea or failure to thrive.

Questions

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

Answers

1. Infantile seborrheic dermatitis
2. Infantile seborrheic dermatitis typically presents with focal or diffuse scaling and crusting of the scalp. Lay people often refer to the condition as cradle cap. Erythematous, greasy, sharply demarcated, scaly patches may involve the face and intertriginous areas of the body. This chronic inflammatory dermatitis has a predilection for areas of high sebaceous gland density. The condition is most common during the first few months of life, paralleling the activity of the sebaceous glands. Both sexes are equally affected. *Pityrosporum ovale* (*Malassezia furfur*) has been implicated as a causative agent as the organism is found in abundance on the scalp of affected patients compared with unaffected ones. However, its role in the pathogenesis is unclear.

   The differential diagnosis of infantile seborrheic dermatitis includes atopic dermatitis, psoriasis and Langerhans cell histiocytosis X. Seborrheic dermatitis is also a common cutaneous manifestation of AIDS.
3. The condition often resolves spontaneously in several months. The use of an antiseborrheic shampoo (selenium sulfide, salicylate acid and tar) and low-potency topical corticosteroid will hasten the resolution

Provided by: Dr. Alexander K. C. Leung; and Dr. Alexander G. Leong

Case 5

Harold's Heel

Harold, an 82-year-old male, presents with an asymptomatic dark lesion on his heel that is slowly growing.

Questions

1. What is your diagnosis?
2. What are the different subtypes of this lesion?
3. How should this patient be treated?

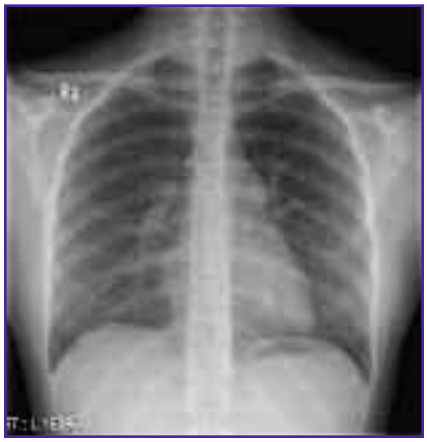
Answers

1. Acral lentiginous melanoma
2. Nodular, superficial spreading, amelanotic, lentigo maligna melanoma and acral lentiginous melanoma
3. Treatment consists of wide excision with consideration of sentinel lymph node biopsy based on Breslow depth. Amputation may be required

Treatment of this condition consists of wide excision with consideration of sentinel lymph node biopsy based on Breslow depth.

Provided by: Dr. Benjamin Barankin

Case 6



Harriet's Heart

Harriet, 19, is noted to have a grade 2/6 ejection systolic murmur at the upper left sternal border during a routine physical examination. There is a high-pitch ejection sound immediately after the first heart sound. The second heart sound is split and is of normal intensity. The patient is asymptomatic. An x-ray of the chest is performed.

Questions

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

Answers

1. Pulmonary stenosis. The x-ray shows post-stenotic dilatation of the main pulmonary artery
2. Patients with mild pulmonary stenosis are usually asymptomatic, as illustrated in the present case. Affected individuals usually lead a normal life. Patients with moderate pulmonary stenosis may have mild dyspnea on exertion. The interval between the first heart sound and the ejection sound varies inversely with the degree of obstruction. Those with severe pulmonary stenosis may present with fatigability, dyspnea and syncope on exertion. Cyanosis may be present if there is a coexisting septal defect. With severe pulmonary stenosis, heart failure may develop, especially in the neonatal period
3. Patients with mild pulmonary stenosis do not require treatment. Antibiotic prophylaxis before dental/surgical procedure is not required. Balloon valvuloplasty is recommended as the initial treatment of choice when the gradient across the pulmonic valve is > 50 mmHg at rest or when the patient is symptomatic. Unfortunately, approximately half of these patients may eventually require open valvotomy with cardiopulmonary bypass. Such patients are at risk for atrial or ventricular arrhythmias

Provided by: Dr. Alexander K. C. Leung; and Dr. Patrick T.S. Ma