Case 1

**Thick Plaque of Skin**

A 57-year-old Asian male presents with a three year history of a thick plaque of skin on his ankle that is incredibly itchy.

**Questions**
1. What is your diagnosis?
2. What are the features of such a lesion?
3. How would you treat this rash?

**Answers**
1. Lichen simplex chronicus or neurodermatitis
2. Neurodermatitis is characterized by thick (leather-like, hyperlinearity), well-defined, incredibly itchy plaques that commonly present on the ankles and the nape of the neck.
3. Treatment can include potent topical steroids with or without menthol, camphor, or tar. Intralional kenalog and phototherapy are also quite helpful, and stress reduction should be discussed.

Provided by: Dr. Benjamin Barakin
Case 2

Pink Nodules on Trunk

A 67-year-old female complains of pinkish, painless nodules on the trunk and abdomen; some have become pedunculated. She also has a few brownish macules on her body that first appeared in childhood, while the pink nodules first appeared during her teens. She has mild hypertension. Her family history is noncontributory.

Questions
1. What is the diagnosis?
2. What is the significance?
3. What are the complications?
4. What is the management?

Answers
1. Neurofibromatosis
2. Two forms of neurofibromatosis appear to exist: classical von Recklinghausen’s neurofibromatosis (NF1) and central, or acoustic, neurofibromatosis (NF2). Von Recklinghausen’s neurofibromatosis is relatively common, affecting about 1 in 5,000. Both types may have café-au-lait macules and neurofibromas, but only the central type has bilateral or unilateral acoustic neuromas. Another feature present in classical NF1, but not present in the central, or acoustic, type, is Lisch nodules (pigmented hamartomas in the iris), which occur in 94% of patients over 60-years-of-age. The disease shows autosomal dominant inheritance; although it is one of the most common mutations in humans, at least half of the cases represent new mutations. The \( NF1 \) gene has been mapped to chromosome 17, and the \( NF2 \) gene is on chromosome 22.
3. Complications develop in about 25% of cases and include hypertension, epilepsy, learning difficulties, scoliosis or bowing of the tibia and fibula, sarcomatous change in neurofibroma (in 1.5 to 15% of cases), and benign tumours of the nervous system, optic gliomas, acoustic neuromas, plexiform neurofibromas, and spinal neurofibromas may develop.
4. Once the diagnosis has been made, genetic counselling and the exclusion of any complicating factors are important.

Provided by: Dr. Jerzy K. Pawlak and Dr. R. Ramgoolam
Case 3

Bluish-grey Patch

A 43-year-old female from the Philippines presents with a bluish-grey facial patch covering areas of her eyelid, nose, and cheek on the right side of her face. She states that it has been progressively enlarging since her childhood. There is no history of this dermatological condition occurring in her family. She has tried various bleaching creams without any improvement.

Questions
1. What is your diagnosis?
2. In which ethnicities is the incidence of this condition more commonly seen?
3. How can this patient be managed?

Answers
1. The nevus of Ota is a benign hyperpigmentary disorder of melanocytic origin, and it is not considered to be hereditary. The incidence is higher in females, and a history of an enlarging patch over the distribution of the ophthalmic and maxillary branches of the trigeminal nerve is common. Rarely, malignant melanoma may develop within these lesions.
2. Nevi of Ota are more prevalent in Asian and East Indian populations. The black population may also have this condition, but it is rare in Caucasians.
3. Conservative therapy would include application of cosmetic cover-up. Bleaching agents are generally not beneficial. Pulsed Q-switched laser therapy is the current treatment of choice for this condition.

Provided by: Dr. Javier Benavides and Dr. Karen Choi
A 68-year-old male, who has a history of chronic dermatitis and is on hemodialysis, has a four day history of erythema and desquamation on over 90% of the body surface area. The patient denies using any new medication.

Questions
1. What is your diagnosis?
2. What are the common causes of this condition?
3. What are the possible treatments?

Answers
1. Erythroderma (generalized exfoliative dermatitis)
2. Common causes of erythroderma are idiopathic causes, medication, lymphoma and leukemia, atopic dermatitis, and psoriasis.
3. The principle of management is to maintain skin moisture, avoid scratching, avoid precipitating factors, apply topical corticosteroids, and treat the underlying etiology and complications. Topical corticosteroids are the primary treatment. Sedative antihistamines may be useful for pruritus relief. Antibiotics are used if an infection is suspected. Other medications specifically indicated for management of the underlying trigger of erythroderma may also be necessary. Patients with erythroderma may require admission for inpatient monitoring and fluid management.

Provided by: Dr. Francesca Cheung
Case 5

Nodule on the Ear

A 76-year-old healthy male presents with a two year history of a painful 9 mm erythematous nodule with raised edges located on the right antihelix. He mentions a habit of sleeping on the right side of his face.

Questions
1. What is the diagnosis?
2. What is the epidemiology of the condition?
3. What are the common clinical features notable in the patient’s history, and what is the standard of care for making the diagnosis?
4. What is the treatment?

Answers
1. This is chondrodermatitis nodularis helicis (CNH). The differential diagnosis includes basal cell carcinoma and squamous cell carcinoma.
2. CNH is usually found in middle-aged to older males and females. The onset is usually preceded by a history of trivial injury at the site, including pressure trauma that would be sustained by sleeping preferentially on one side every night at the apex of the helix or antihelix.
3. The presentation may include bilateral ear involvement but is usually unilateral. The nodules grow rapidly to a stable size (7 to 10 mm) and are chronic. The standard of care, when the diagnosis is in doubt, involves a skin biopsy.
4. Ring-shaped, soft devices, such as “donut pillows,” can be utilized to relieve the pressure during sleep. Injection of soft tissue fillers can also create some cushioning. Topical or intralesional corticosteroids are beneficial if lesions are inflamed. In the rare case of infection, topical antibiotics are indicated. Surgical referral should be considered if medical management fails.

Provided by: Ms. Jessica Asgarpour, Mr. Russell Wong, and Dr. Jaggi Rao
A six-year-old boy presents with a mass on the left side of the scrotum. The mass is more prominent in a standing position, especially when the child is coughing. The mass does not transilluminate.

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

Answers
1. Indirect inguinal hernia
2. An indirect inguinal hernia results from a failure of fusion of the processus vaginalis. The incidence of indirect inguinal hernia in term infants is 1 to 2%. In premature infants, the incidence is 9 to 10%. The male to female ratio is 10:1. The hallmark of an indirect inguinal hernia is an intermittent bulge in the groin, scrotum, or labia majora. The bulge is most apparent during periods of increased intra-abdominal pressure. The cranial extension prevents the examiner from getting around the top of the bulge. The mass typically reduces spontaneously when the child relaxes or with gentle pressure. The spermatic cord on the ipsilateral side is often thickened. The condition is often asymptomatic. Incarceration occurs most often during the first six months of life. Occasionally, strangulation may occur.
3. Surgical repair of the hernia should be carried out electively shortly after diagnosis. There is controversy about whether the contralateral groin should be explored. The current body of literature supports the routine use of transinguinal laparoscopy to evaluate for a contralateral patent processus vaginalis. Nowadays, most surgeons do not routinely perform a contralateral exploration unless a contralateral inguinal hernia or patent processus vaginalis can be demonstrated either by preoperative ultrasonography or intraoperative laparoscopy. Laparoscopic inguinal hernia repair has become an alternative to the conventional open herniotomy.

Provided by: Dr. Alexander K.C. Leung and Dr. Andrew S. Wong