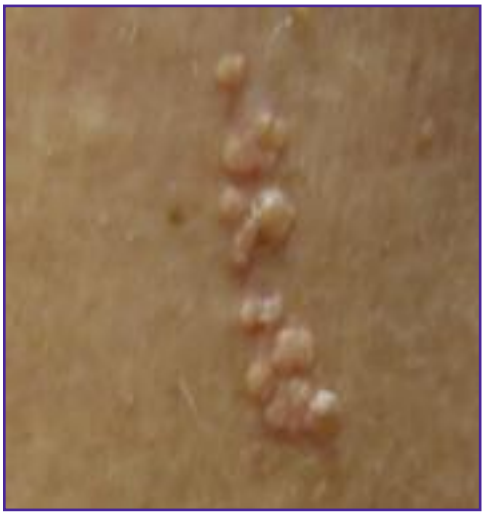
Illustrated quizzes on problems seen in everyday practice

Case 1: Paula's Papules



Paula, 44, presents with a long-standing history of asymptomatic verrucous papules on her neck.

Questions

1. What is the diagnosis?
2. What area of the body is most commonly affected?
3. How could you treat this lesion?

Answers

1. Linear epidermal nevus, a congenital hamartoma.
2. Head, neck and trunk.
3. Surgical excision, electrodesiccation and/or curettage, or CO_2 laser ablation. Topical retinoids or topical vitamin D analogues (*e.g.*, calcipotriol) can also be tried, especially in children.

Provided by: Dr. Benjamin Barankin

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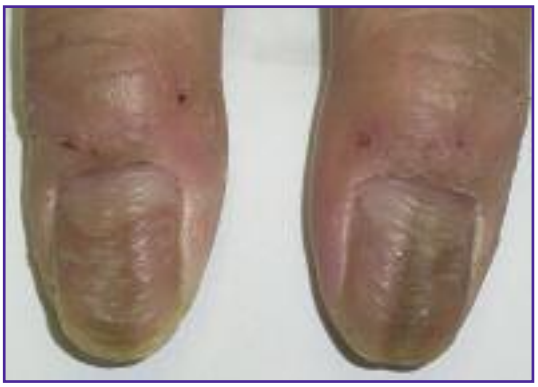
Case 2: Travis' Thumbnails



Travis, a 50-year-old man, presents with abnormal looking thumbnails for the past year. He has a habit of picking the proximal nail folds of the thumbnails.

Questions

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

Answers

1. Median nail dystrophy.
2. Also known as median canaliform dystrophy of Heller and dystrophia unguium mediana canaliformis, median nail dystrophy is characterized by a paramedian canal or split in the nail plate of one or more nails. Small cracks or fissures that extend laterally from the central canal or split give the appearance of an inverted fir tree or Christmas tree. The condition is usually symmetrical and most often affects the thumbs, although other fingers may be involved. Rarely, the toes are affected. If that is the case, it is usually the great toes. The exact pathogenesis of median nail dystrophy is not known. A temporary defect in the matrix that interferes with nail formation is thought to be the cause. Habitual picking of the nail base may be responsible in some instances. Median nail dystrophy has been reported following the systemic use of isotretinoin. Familial occurrence has also been described.
3. No treatment is necessary or effective. The condition tends to resolve spontaneously over a period of months to years. However, the deformity often recurs.

Provided by: Dr. Alexander K. C. Leung; and Dr. James C. W. Kong

Case 3: Estelle's Eye

Estelle, 80, presents to the office with a red left eye. She has atrial fibrillation and is on warfarin. She reports no pain or visual disturbances. Her BP is well controlled at 110/72 bpm.

Questions

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

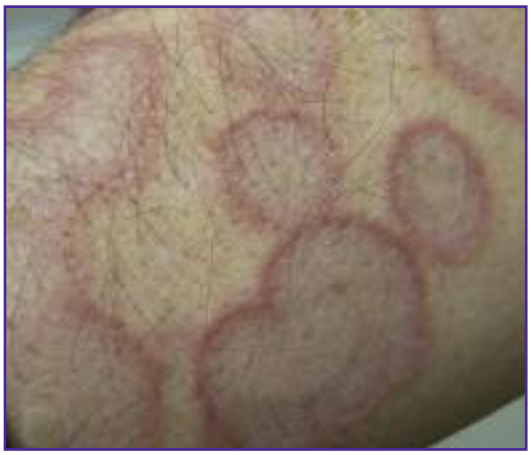
Answers

1. The diagnosis is subconjunctival hemorrhage.
2. Subconjunctival hemorrhage is defined as blood between the conjunctiva and the sclera. This results from bleeding of the conjunctival or the episcleral blood vessels into the subconjunctival space.
3. Her INR was 2.4, in the suggested therapeutic range. The condition is benign and self-limiting, so no active treatment was offered. The condition resolved over a two week period.

This condition results from bleeding of the conjunctival or the episcleral blood vessels into the subconjunctival space.

Provided by: Dr. Werner Oberholzer; and Dr. Nelleke Helms

Case 4: Parker's Plaques



Parker, 40, presents with a several-year history of these expanding annular plaques on his arms and trunk, which are not scaly. Parker has two dogs at home.

Questions

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

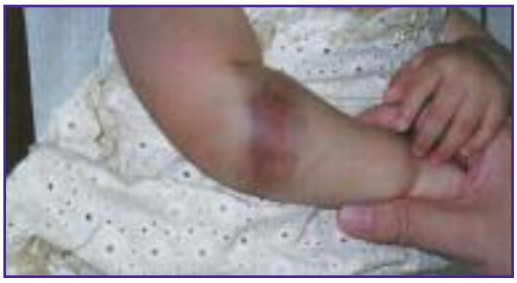
Answers

1. Granuloma annulare, a benign inflammatory dermatosis characterizied by papules and annular plaques.
2. Localized, generalized (as in this case), subcutaneous, perforating and arcuate dermal erythema.
3. Reassurance as to the benign nature of this rash is important. Treatment options for cosmesis include potent topical steroids and intralesional steroids for localized lesions. For widespread involvement, phototherapy, prednisone, dapsone, pentoxifylline, oral retinoids and cyclosporine can all be considered.

Reassurance as to the benign nature of this rash is important.

Provided by: Dr. Benjamin Barankin

Case 5: Beth's Bruises



Beth, a 14-month-old girl, presents with an extensive bruise on the right forearm. She had similar bruises on her extremities before. There was no history of trauma. Her mother has a history of easy bruisability and menorrhagia. Laboratory tests showed that the ristocetin cofactor activity and ristocetin-induced platelet aggregation were decreased.

Questions

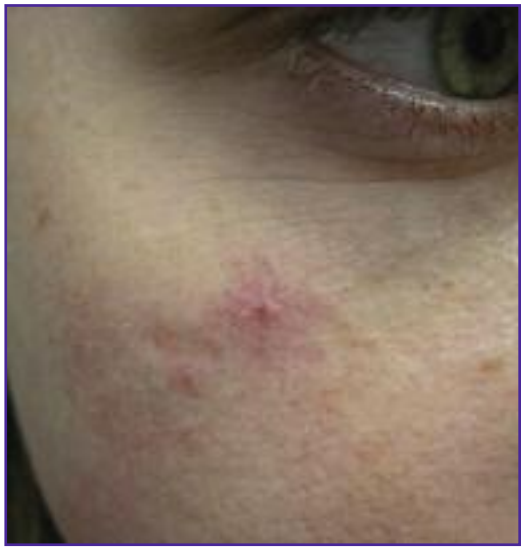
1. What is the diagnosis?
2. What is the significance?
3. What is the treatment?

Answers

1. von Willebrand disease.
2. von Willebrand disease is due to either deficiency or dysfunction of von Willebrand factor (vWF). Such abnormalities result in decreased platelet adhesiveness, impaired agglutination of platelets in the presence of ristocetin, prolonged bleeding time and decreased factor VIII procoagulant activity. The condition is inherited as an autosomal dominant trait. Clinical manifestations include excessive bruising, epistaxis, menorrhagia and postoperative hemorrhage especially after mucosal surgery. Tests that are useful in the diagnosis and differentiation of the different variants of von Willebrand disease include von Willebrand antigen, ristocetin cofactor activity, ristocetin-induced platelet aggregation, vWF multimers, bleeding time and platelet count, prothrombin time and activated partial thromboplastin time.
3. Desmopressin is the drug of choice for mild-to-moderate bleeding episodes. Desmopressin stimulates the release of vWF stores from vascular endothelium. For severe bleeding episodes, preparation for surgery and those who do not respond to Desmopressin, replacement therapy through the use of plasma-derived vWF containing concentrates that also contain factor VIII should be considered.

Provided by: Dr. Alexander K. C. Leung; and Dr. Justine H. S. Fong

Case 6: Lucie's Lines



If this condition develops during pregnancy, it may spontaneously resolve within a year after delivery.

Lucie, 17, presents with an asymptomatic red papule with radiating lines on her cheek.

Questions

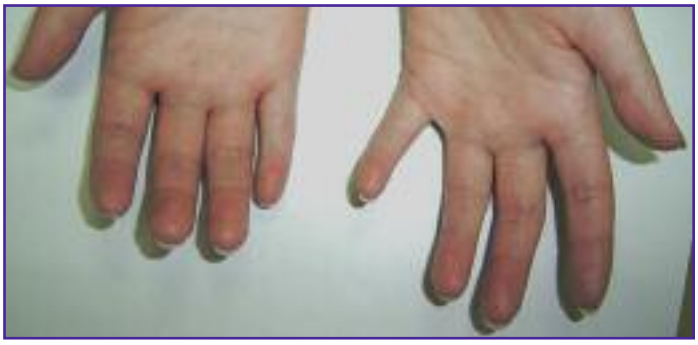
1. What is your diagnosis?
2. Which individuals are more likely to develop this lesion?
3. How would you treat this lesion?

Answers

1. Spider angioma/nevus araneus, a commonly acquired benign vascular lesion.
2. Women during pregnancy or on OCs. Also, significant liver disease can result in prominent lesions.
3. Reassure the patient as to benign nature. If the lesions develop during pregnancy, they may spontaneously resolve within a year after delivery. Otherwise, careful electrodesiccation or laser therapy are effective options.

Provided by: Dr. Benjamin Barankin

Case 7: Fiona's Fingers



Fiona, 12, is noted to have absence of creases in both fifth fingers. There is no history of similar deformities in other family members.

Questions

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

Answers

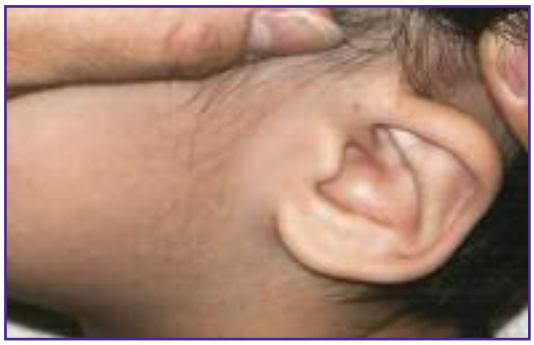
1. Bilateral symphalangism of the fifth fingers. Symphalangism refers to congenital absence of joints between the phalanges. An x-ray of the hands should be done to confirm the diagnosis.
2. Symphalangism can be sporadic or familial. An autosomal dominant mode of inheritance has been described. Mutations in the genes *NOG* or *GDF5* may result in symphalangism.

   Symphalangism can be an isolated finding. It can also occur as a manifestation of:
   - Multiple synostosis syndrome (symphalangism syndrome)
   - Apert syndrome
   - Poland syndrome
   - Pfeiffer syndrome
   - Curry-Jones syndrome

   The condition can be associated with brachydactyly or conductive hearing loss.
3. Surgical correction is not required in the majority of patients since the fused phalanges seldom cause dysfunction of the hand.

Provided by: Dr. Alexander K.C. Leung; and Dr. Albert Y. F. Kong

Case 8: Emma's Ear



Emma, a six-month-old Chinese girl, presents with an asymptomatic pit in the anterior superior aspect of the left auricle. The anomaly was first noted at birth. Her father has a similar anomaly in the right auricle.

Questions

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

Answers

1. Preauricular sinus.
2. A preauricular sinus results from incomplete fusion of the tubercles of the first and second branchial arches. The sinus has a cutaneous opening and a blind inner end and is lined by stratified squamous epithelium. The condition may be unilateral or bilateral. The anomaly is found in 1% of Caucasians, 5% of African Americans and 10% of Asians and can occur as a familial trait. A preauricular sinus is usually an isolated finding. Occasionally, it may be associated with branchio-oto syndrome, branchio-oto-renal syndrome, Treacher-Collins syndrome and Goldenhar syndrome.
3. Most preauricular sinuses are asymptomatic and require no intervention. At times, the sinus may become infected and requires systemic antibiotic treatment. If the infection recurs or persists, meticulous excision of entire sinus tract is necessary.

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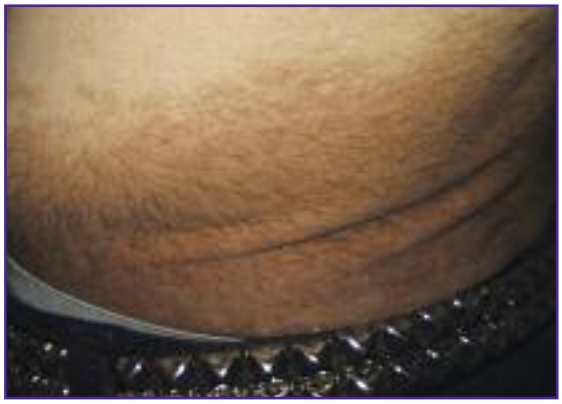
Provided by: Dr. Alexander K. C. Leung; and Dr. Alexander G. Leong

Case 9: Aaron's Abdomen



Aaron, 18, presents with a hyperpigmented and hypertrichotic patch on his abdomen which became noticeable around puberty.

Questions

1. What is the diagnosis?
2. Why are men more commonly affected?
3. How would you manage this patient?

Answers

1. Becker nevus.
2. Androgens appear to play a role as there is a male preponderance, hypertrichosis and occasional acneiform lesions, increased androgen receptors in lesional skin and a peripubertal development.
3. Educate and reassure as to the benign nature of the lesion. The hyperpigmentation is very difficult to treat, but the hypertrichosis can be treated with laser if that is the main concern of the patient. Dx

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