Illustrated quizzes on problems seen in everyday practice

CASE 1: RHIANNON'S RING FINGER



Rhiannon, 31, presents with a recurrent, pruritic papulovesicular plaque on her finger. The rash clears a couple weeks after she stops wearing her wedding ring.

Questions

- 1. What is the diagnosis?
- 2. What are the different types of contact dermatitis?
- 3. How would you manage this condition?

Answers

- 1. Allergic contact dermatitis to nickel.
- Allergic contact dermatitis, irritant contact dermatitis, photo contact dermatitis and contact urticaria.
- 3. Based on history and physical examination, it can usually be determined that an allergic contact dermatitis has occurred. To identify the inciting agent, a patch test performed by a dermatologist can be worthwhile. The offending allergen must be avoided and potent topical steroids can be used to clear the rash over a few days time.

Provided by: Dr. Benjamin Barankin

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The Canadian Journal of Diagnosis

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CASE 2: LIAM'S LINEAR ERUPTION



Liam is a three-year-old boy who presents with a mildly pruritic eruption on the left arm of three weeks duration. There is no history of recent drug ingestion.

Questions

- 1. What is the diagnosis?
- 2. What is the differential diagnosis?
- 3. Which age group is most commonly affected by this condition?
- 4. What is the natural history of this condition?

Answers

- 1. Lichen striatus. This is an acquired idiopathic condition characterized by a unilateral, linear eruption consisting of confluent eczematous or lichenoid papules.
- 2. Inflammatory linear verrucous epidermal nevus is typically present at birth and does not spontaneously regress with time.

Lichen planus tends to present as randomly scattered purple, polygonal-shaped papules with characteristic Wickham's striae on the surface in adults. Infrequently, a linear form of lichen planus has been described. Rarely, drug reactions may present in a linear fixed location.

- 3. Young children (< 15-years-of-age) are most commonly affected.
- 4. Although lichen striatus is a self-limited, benign disorder, it may last for up to 12 months. Mild-to-mid potent topical steroid creams or calcineurin inhibitors may be prescribed for relief of pruritus.

Provided by: Dr. Simon K. Lee

CASE 3: MARTHA'S MASS



The lesion begins as a pearly white, dome-shaped papule resembling at first a molluscum contagiosum or dermal nevus.

Martha, an 84-year-old female, presents with a pearly, dome-shaped mass with prominent telangiectatic vessels.

Questions

- 1. What first-line investigation should be performed?
- 2. What is the diagnosis?
- 3. What is the significance?

Answers

- 1. Biopsy is essential for all suspected skin tumours or lesions.
- 2. The biopsy showed basal cell carcinoma (nodular BCC).
- 3. Nodular BCC is the most common form. The lesion begins as a pearly white, dome-shaped papule resembling at first a molluscum contagiosum or dermal nevus. The mass extends peripherally and telangiectatic vessels become prominent and easily recognizable through the thin epidermis. The growth pattern is irregular, forming an oval mass whereby the surface may become multilobular. The center frequently ulcerates and bleeds and after accumulates crust and scale. Ulcerated nodular BCC is also called "rodent ulcer."

Provided by: Dr. J. K. Pawlak

CASE 4: PETER'S PAINFUL PAPULES



Consideration and management of postherpetic neuralgia is important, especially in an older population.

Peter, a 62-year-old male, presents with painful erythematosus papules and vesicles on the abdomen.

Questions

- 1. What is your diagnosis?
- 2. What is the likelihood of developing this rash if you live beyond 80 years of age?
- 3. How would you manage this patient?

Answers

- 1. Shingles/herpes zoster virus infection.
- 2. Approximately 50%.
- Oral antiviral agents instituted as soon as possible. Uncommonly, oral prednisone may be employed. Consideration and management of postherpetic neuralgia is important, especially in an older population.

Provided by: Dr. Benjamin Barankin

CASE 5: LUKAS' LEGS



Lukas, a nine-month-old boy, presents with hypopigmentation of the skin in the lower extremities following application of a cream q.i.d. for two months. The cream was prescribed for the treatment of atopic dermatitis.

Questions

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

Answers

- 1. Hypopigmentation of the skin from topical application of hydrocortisone.
- Topical corticosteroids are the mainstay of therapy for atopic dermatitis. The risk of side-effects depends on:
 - the potency of the corticosteroid,
 - concomitant use of occlusion,
 - the area being covered,
 - · skin integrity and
 - duration of treatment.

Compared with adults, children are at higher risk of both local and systemic side-effects. Local adverse effects include hypopigmentation, skin atrophy, striae, telangiectasia, decreased subcutaneous adipose tissue, rosacea, perioral dermatitis, folliculitis and steroid acne. Among systemic side-effects are Cushing's syndrome, adrenal suppression, cataracts, glaucoma and growth retardation.

3. Topical corticosteroids should not be used unless indicated. In general, the least potent corticosteroid that can control the symptom should be used. Topical corticosteroids should not be applied more than twice a day; frequent use does not improve efficacy and increases the risk of side-effects.

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

CASE 6: RON'S RECURRENT RASH



Severe cases of this condition may respond to localized UV light therapy.

Ron, a 20-year-old university student, complains of a recurrent, intermittent eruption of his hands of several years duration. He denies any chemical exposure.

Questions

- 1. What is the diagnosis?
- 2. Which age group is most commonly affected?
- 3. What are the differential diagnoses?
- 4. What is the management?

Answers

- Recurrent focal palmar peeling. It was previously called keratolysis exfoliativa.
 Some authors consider this entity a variant of pompholyx.
- 2. Young adults, especially in summer months.
- 3. Allergic contact dermatitis, psoriasis and tinea manum.
- 4. Avoidance of irritants, treat with emollients (*e.g.*, urea, lactic acid, silicone) and mild steroid creams. Severe cases may respond to localized UV light therapy.

Provided by: Dr. Simon Lee

CASE 7: SHAWN'S SHOULDER



Shawn, 14, presents with an asymptomatic, brownish patch on the left shoulder. The lesion was first noted four years ago and has been progressively getting bigger. The patch has discrete margins but irregular borders.

Questions

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

Answers

- 1. Becker's nevus.
- 2. Becker's nevus typically begins in the second decade of life as a circumscribed brownish macule or patch that gradually enlarges slowly in an irregular fashion to give a geographical configuration. Hairiness usually develops a few years later in approximately 50% of cases in the region of the pigmented area and

become coarser and darker with time. The lesion is usually asymptomatic, unilateral and has a predilection for the shoulder and upper chest. Becker's nevus occurs in approximately 0.5% of young men. The male to female ratio is approximately 5:1.

3. No treatment is necessary although the lesion tends to persist. For cosmetic purposes, Q-switched lasers can be used to treat the hyperpigmentation and hair removal lasers for unwanted hypertrichosis.

Provided by: Dr. Alexander K. C. Leung; and Dr. Stewart Adams.