

Test your knowledge with multiple-choice cases

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Case 1

Pruritic, Scaly Knee Patch

A 62-year-old male was treated successfully for widespread dermatitis with Fluocinonide (LydermTM) cream. However, a plaque on his right knee continued to enlarge and became diffusely scaly and pruritic despite the course of treatment.

What is your diagnosis?

- a. Mycosis fungoides
- b. Tinea incognito
- c. Steroid allergy
- d. Persistent dermatitis

Answer

Tinea incognito (answer b) results from tinea corporis that is misdiagnosed as an inflammatory der- exaggerated appearance with diffuse erythema, corticosteroids. The inflammation caused by the infection temporarily subsides and the rash appears to improve. However, the fungal infection is permitted to grow in the setting of impaired immunity, and the morphology of the rash is altered. Tinea incognito is most commonly seen in the groin, face and hands, but can also occur in other areas of the body as demonstrated in this case.

Several characteristic changes occur with the use of topical corticosteroids. The well-defined borders may lose their scale, become irregular and expand beyond the initial localized area. The classic annular configuration of a tinea corporis is lost because the central region does not clear. There may also be an



matosis and is inappropriately treated with topical scale, pustules or papules and a brown to deep red, or violaceous pigmentation. The rash may range from pruritic to asymptomatic.

> If tinea incognito is suspected, topical corticosteroids should be stopped. After a few days, the characteristic scaling will recur and hyphae can be observed on microscopy. Topical or systemic antifungal treatment should then be initiated depending on the site and severity of the infection.

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Red, Cracked Skin

A 40-year-old construction worker presents with red, cracked skin on both thumbs and palms.

What is your diagnosis?

- a. Eczema
- b. Atopic dermatitis
- c. Irritant contact dermatitis
- d. Allergic contact dermatitis

Answer

This patient has irritant contact dermatitis (answer c) affecting both palms and thumbs. Irritant contact dermatitis is a skin condition characterized by erythema, inflammation and scaling, most often affecting the hands. Patients will typically present with macular erythema and hyperkeratosis, and the epidermis often appears either dry or glazed. Many factors can contribute to the onset of this condition, including exposure to workplace solvents and other chemicals.

Irritant contact dermatitis can be diagnosed based on clinical findings; differentiation from allergic contact dermatitis can be determined by patch testing and pattern of involvement, and medical history documenting sufficient exposure to the suspected irritant.



Topical steroids may be used to treat irritant contact dermatitis; however, treatment should be focused on identifying the causative irritant and minimizing exposure through the use of protective clothing and barrier creams.

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Blue-black Shoulder Lesion

This 30-year-old male developed an asymptomatic blue-black lesion on his shoulder five years ago.

What is your diagnosis?

- a. Melanoma
- b. Dysplastic nevus
- c. Glomus tumour
- d. Venous bleb
- e. Venous malformation

Answer

This venous bleb (answer d) is best differentiated from other lesions by the fact that it is compressible, much like a venous lake. A venous malformation may appear similar but is more palpable. It is benign, but



may be removed by scoop excision and cautery, cautery alone or laser. If in doubt, a biopsy is required. Stanley Wine, MD, FRCPC, is a Dermatologist in North York, Ontario.

Perianal Redness

A 6-year-old boy presents with a three week history of painful defecation. On examination, a welldemarcated, homogenous patch of erythema was noted in the perianal region. Purulent discharge was present.

What is your diagnosis?

- a. Candidiasis
- b. Sexual abuse
- c. Perianal (group A) streptococcal dermatitis
- d. Seborrheic dermatitis
- e. Psoriasis

Answer

Perianal streptococcal dermatitis (answer c) is characterized by a bright-red, sharply demarcated rash caused by group A \(\beta\)-hemolytic streptococci. The infection is prevalent amongst children between 6 months to 10 years of age. Both a rapid streptococcal swab test and routine skin culture of the affected area can confirm diagnosis. Common associated symptoms include occasional fissures, purulent discharge, rectal pruritus, painful defecation, bloodstreaked stools and constipation. Fever is rare. Treatment includes oral amoxicillin or penicillin V and/or topical mupirocin (Bactroban©). Rapid improvement is achieved with early antibiotic treatment. However, follow-up is needed as recurrences are common.

Pinpoint pustulovesicular satellite lesions are diagnostic hallmarks of candidiasis. A raised edge with white scales at the border may also be noted.



Sexual abuse at the perianal area often causes anal dilation, with evident abrasions, lacerations and scarring. Seborrheic dermatitis is defined by sharply demarcated scaly patches that are salmoncoloured but greasy-looking. The lesions respond quickly to topical anti-inflammatories. The presence of psoriasis in the diaper region may be confirmed diagnostically by the presence of nail changes and erythematous, well-demarcated plaques with silvery scales elsewhere on the body, including the trunk, umbilicus or scalp.

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Rough, Scaly Papules on Scalp

A 77-year-old male presents with numerous rough, red scaly papules on his scalp. He used to work as a lifeguard and he has served in the marines.

What is your diagnosis?

- a. Basal cell carcinoma
- b. Squamous cell carcinoma
- c. Seborrheic keratoses
- d. Actinic keratoses
- e. Dermatoheliosis

Answer

Actinic keratoses (answer d) are the most common premalignant skin lesion, which present as discrete scaly, red, rough, papules measuring a few millimeters. They typically present on the face, dorsal hands and forearms, and less commonly on the legs. Individual lesions are typically managed with liquid nitrogen cryotherapy. Other treatment options, especially when



numerous lesions are present, include topical 5-fluorouracil and topical imiquimod, and less commonly, chemical peels. Thicker lesions should be curetted or excised. Biopsy of hypertrophic lesions or those not responding to the aforementioned treatments should be performed to rule out invasive squamous cell carcinoma.

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Reader's Response

Cystic 'Neck' Structure

Reader's Response

The answer to DermCase 3 in the July 2010 issue (Volume 22, Number 7), entitled "Cystic Chest Structure," adequately discusses a branchial cleft cyst or sinus. However, a few points of information are necessary:

The position of the exit draining sinus is an indiction of the cleft of origin. The most common branchial cleft sinus is as described. It is correctly noted to be in the lower neck at the anterior edge of the sternocleidomastoid muscle (SCM). It is often a fistula with the inside opening in the pharyngeal tonsillar fossa area. It drains

a watery effluent rather than mucus or colloid-like material. It is present at birth.

However, the clinical description is a pit over the left upper chest with a palpable cyst beneath it. (the position on the photograph was not clear). This is the site for a dermoid sinus and cyst. These, probably embryonic maladies present with local inflammation. Their surgical removal must be tackled with due care as nasty scar formation may eventuate.

Submitted by: Dr. Steven Rubin, Pediatric Surgeon

Author's Reply

We welcome Dr. Rubin's response and agree with his comments. The patient's expressed chief complaint was a pit over the upper chest, but on examination, the pit was actually located over the anterior neck. A clearer photo has been provided here at the right that clearly delineates this.

We apologize for the error in presentation. The discussion material and information remain unchanged.

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