

Subspecialty Rotation: Dermatology

Faculty:

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GOAL: Prevention, Counseling and Screening (Dermatology). Understand the pediatrician's role in preventing illness and dysfunction related to skin disorders through counseling, screening and early intervention.

Describe the epidemiology of common pediatric skin conditions and discuss evidence-based strategies to prevent disease and dysfunction.

Counsel parents and children about prevention or reduction of:

1. Sun damage
2. Bites from spiders, insects, and ticks, and use of repellents suitable for children

Identify the importance of and regularly perform office screening for dermatologic conditions, including:

1. History for risk factors (family history, exposures)
2. Unclothed physical exam to screen for congenital and inherited conditions, cutaneous manifestations of systemic disease, suspicious changes in nevi

GOAL: Normal vs. Abnormal (Dermatology). Differentiate normal from pathological skin findings and perform office screening as needed.

Distinguish skin lesions or findings that are normal, transient, or clinically insignificant from those that warrant observation, evaluation or treatment.

Develop a logical, scientifically sound approach to the evaluation of skin findings.

GOAL: Undifferentiated Signs and Symptoms (Dermatology). Evaluate and appropriately treat or refer common presenting dermatologic signs and symptoms.

Describe the differential diagnoses of primary and secondary skin lesions and an initial strategy for evaluation and management of:

1. Macules or papules

2. Vesicles or bullae
3. Pustules
4. Purpura
5. Hypopigmented lesions
6. Hyperpigmented lesions
7. Vascular lesions
8. Annules
9. Atrophic lesions
10. Associated scaling of lesions

Describe differential diagnosis and initial strategies for evaluating:

1. Hair loss
2. Abnormal hair distribution, structure or texture
3. Abnormal structure or shape of nails
4. Pruritus

Request or perform and interpret the following relevant clinical and laboratory studies: skin scraping for microscopic evaluation (fungal, scabies), skin and wound cultures, specimen collection for fungal infection of skin or scalp, wood's lamp exam of skin, cryotherapy for warts or molluscum.

GOAL: Common Conditions Not Referred (Dermatology). Diagnose and manage common dermatological conditions generally not referred to dermatologist.

Diagnose and manage the following conditions without routine support of dermatologist:

1. Acanthosis nigricans
2. Acne (mild and moderate)
3. Acute urticaria
4. Alopecia (traction, trichotillomania, tinea capitis, drug-induced)
5. Atopic dermatitis (mild and moderate)
6. Benign, transient skin conditions in newborns and young infants

7. Contact dermatitis
8. Dermatophyte infections (tinea capitis, tinea corporis, tinea pedis, tinea versicolor, kerion)
9. Diaper dermatitis
10. Drug rashes (common and uncomplicated)
11. Erythema multiforme
12. Granuloma annulare
13. Hemangiomas (uncomplicated)
14. Herpes simplex and zoster infections
15. Hyperpigmented and hypopigmented lesions
16. Impetigo
17. Intertrigo
18. Keratosis pilaris
19. Lice (head, body, pubic)
20. Lichen striatus
21. Lyme disease (erythema migrans)
22. Melanocytic nevi (small, uncomplicated, congenital or acquired)
23. Molluscum contagiosum
24. Monilial skin rashes
25. Perianal strep
26. Perioral dermatitis
27. Pityriasis rosea
28. Scabies
29. Seborrheic dermatitis (mild and moderate)
30. Viral exanthems
31. Warts (common, plantar, flat, filiform)

GOAL: Conditions Generally Referred (Dermatology). Recognize, provide initial management, and appropriately refer dermatological conditions that usually require referral.

Recognize, provide initial management of, and appropriately refer these conditions:

1. Acne (severe or cystic)
2. Seborrheic dermatitis (severe or complicated)
3. Eczema, severe or complicated
4. Eczema herpeticum
5. Chronic urticaria
6. Congenital skin disorders (ichthyoses, unusual birthmarks)
7. Cutaneous manifestations of child abuse and factitial dermatitides
8. Dermatologic findings that suggest serious systemic or genetic disorders
9. Drug reactions (severe)
10. Erythema multiforme major (Stevens-Johnson syndrome)
11. Erythema nodosum and other forms of panniculitis
12. Hemangiomas (complicated)
13. Hyperhidrosis
14. Lichen sclerosus et atrophicus
15. Mastocytosis (urticaria pigmentosa, mastocytomas)
16. Melanocytic nevi suspicious for malignancy
17. Giant congenital melanocytic nevi
18. Morphea (localized scleroderma)
19. Onychomycosis
20. Pityriasis lichenoides et varioliformis acuta/chronica
21. Photosensitivity (polymorphous light eruptions, phytophotodermatitis, neonatal lupus and other connective tissue disorders)
22. Psoriasis
23. Vascular malformations (facial port wine stains, atypical vascular malformations)
24. Vitiligo
25. Warts (complicated plantar, nail bed, genital, resistant)

26. Atypical presentations of skin conditions that do not conform to classical patterns or respond to conventional therapy

Recognize the serious nature of, respond promptly and rapidly refer any skin lesions associated with:

1. Malignancy
2. Serious involvement of other organ systems
3. A rapidly progressive course that might lead to permanent scarring or serious or fatal systemic sequelae (e.g., acne fulminans, Kasabach-Merritt syndrome, serious systemic infections)

Identify the role and general scope of practice of a pediatric dermatologist; describe cases best managed by a plastic surgeon vs. a dermatologist; recognize situations where children benefit from the skills of a specialist trained in the care of children; work effectively with these professionals in the care of children's skin conditions.

GOAL: Atopic Dermatitis. Diagnose and manage atopic dermatitis.

Describe epidemiology, pathophysiology and evidence-based preventive strategies and medical interventions for atopic dermatitis.

Recognize the cardinal clinical features of atopic dermatitis.

Differentiate various presentations of atopic dermatitis in patients and discuss differential diagnoses.

Manage uncomplicated atopic dermatitis, including development of skin care regimens.

Appropriately use topical steroids, topical T-cell immunomodulators, topical and oral antibiotics, and antihistamines.

Understand the economic and psychosocial costs of treatment.

Anticipate potential complications of therapy.

Describe conditions that may complicate atopic dermatitis and discuss treatment options.

Counsel parents and children regarding cause, course, treatment, and prognosis of atopic dermatitis.

GOAL: Acne. Diagnose acne and manage mild to moderate cases.

Differentiate acne from other similar-appearing conditions.

Distinguish the clinical features that differentiate mild from severe acne.

Describe factors that contribute to the development and severity of acne.

Use topical medications that are effective in acne management (benzoyl peroxide, topical retinoids, topical antibiotics).

Explain the role and possible side effects of systemic antibiotics in acne management.

Understand the role of hormonal contraceptives in the management of acne.

Implement a step-wise approach to the management of acne, including skin care, topical and systemic medications.

Refer appropriate cases of acne to a dermatologist.

Counsel patients regarding cause, course, and prognosis of acne, and help them deal with common psychological ramifications.

GOAL: Hemangiomas. Diagnose hemangiomas and manage uncomplicated cases.

Distinguish clinical features of hemangiomas: superficial, deep, mixed.

Differentiate hemangiomas from other vascular phenomena.

Counsel patients and families regarding the cause, course, and prognosis of hemangiomas.

Refer hemangiomas with features that signal potential complications (e.g., atypical appearance, periocular, perioral, nasal tip, large craniofacial, genital, midline axial locations, multiple lesions, ulcerated, visceral hemangiomatosis).

GOAL: Melanocytic nevi. Diagnose and refer important or worrisome changes in melanocytic nevi.

Distinguish normal melanocytic nevi from atypical or dysplastic nevi and melanoma.

Counsel patients and families regarding the cause, course, and prognosis of congenital and acquired melanocytic nevi and their potential malignant risk.

Anticipate factors that may contribute to increased risk for malignant transformation in congenital and acquired melanocytic nevi.

Educate patients and families regarding sunscreen use, sun protective measures, sun avoidance practices (including avoidance of tanning parlors), and self-examination.

GOAL: Tinea capitis. Reliably diagnose tinea capitis and treat the condition appropriately.

Recognize the various clinical presentations of tinea capitis.

Confirm the diagnosis of tinea capitis with appropriate laboratory testing.

Differentiate tinea capitis from other similar-appearing conditions.

Manage tinea capitis, using medications at indicated dosages and durations, and monitoring for side effects of therapy.

Prescribe prophylactic therapy with topical antifungal shampoos when appropriate.

Counsel families on how to implement measures to prevent re-infection and spread to contacts at home and in the community.

GOAL: Therapeutic Regimens in Management of Dermatologic Conditions. Proficiently use a variety of dermatologic treatment regimens in a logical, effective manner.

Properly use common dermatologic preparations, considering cost, convenience, efficacy, side effects and impact on growth and development. These include:

1. Medication vehicle (ointments, creams, gels, lotions, solutions, foams, sprays)
2. Topical steroids of varying potency and oral corticosteroids
3. Topical T-cell immunomodulators
4. Topical and oral antibiotics
5. Topical and oral antifungals
6. Topical moisturizers
7. Topical retinoids
8. Antihistamines
9. Compresses with tap water, Domeboro, Burow's solutions

Procedures

GOAL: Technical and therapeutic procedures. Describe the following procedures, including how they work and when they should be used; competently perform those commonly used by the pediatrician in practice.

Abscess: I & D of superficial abscesses

Abscess: aspiration

Anesthesia/analgesia: digital blocks

Anesthesia/analgesia: local/topical

Foreign body removal (simple): subcutaneous

Genital wart treatment

Hair collection: tinea

Liquid nitrogen treatment for molluscum/warts

Skin scraping

Sterile technique

Wood's lamp examination of skin

Source

Kittredge, D., Baldwin, C. D., Bar-on, M. E., Beach, P. S., Trimm, R. F. (Eds.). (2004). APA Educational Guidelines for Pediatric Residency. Ambulatory Pediatric Association Website. Available online: www.ambpeds.org/egweb. [Accessed 03/02/2005]. Project to develop this website was funded by the Josiah Macy, Jr. Foundation 2002-2005.