Elective Subspecialty Rotation: Pediatric Dermatology

Residents: Pediatric Residents at the PL1, PL2 or PL3 level.

Prerequisites: None.

Primary Goals for this Rotation

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

- 1 : Describe the epidemiology of common pediatric skin conditions and discuss evidence-based strategies to prevent disease and dysfunction.
- 2 : 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
- 3 : Identify the importance of and regularly perform office screening for dermatologic conditions, including:
 - 1. History for risk factors (family history, exposures)
 - 2. Physical exam to screen for congenital and inherited conditions, cutaneous manifestations of systemic disease, suspicious changes in nevi

GOAL: Normal vs. Abnormal. Differentiate normal from pathological skin findings.

- 1 : Distinguish skin lesions or findings that are normal, transient, or clinically insignificant from those that warrant observation, evaluation or treatment.
- 2 : Develop a logical, scientifically sound approach to the evaluation of skin findings.

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

- 1 : 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
- 2 : 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
- 3: 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.

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

- 1 : Diagnose and manage the following conditions:
 - 1. Acanthosis nigricans
 - 2. Acne
 - 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
 - 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. Recognize, provide initial management, and appropriately refer dermatological conditions that usually require referral.

- 1 : 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
- 2 : Recognize the serious nature of, 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)
- 3: Identify the role and general scope of practice of a pediatric 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.

- 1 : Describe epidemiology, pathophysiology and evidence-based preventive strategies and medical interventions for atopic dermatitis.
- 2 : Recognize the cardinal clinical features of atopic dermatitis.
- 3 : Differentiate various presentations of atopic dermatitis in patients and discuss differential diagnoses.
- 4 : Manage uncomplicated atopic dermatitis, including development of skin care regimens.
- 5 : Appropriately use topical steroids, topical and oral antibiotics, and antihistamines.
- 6: Understand the economic and psychosocial costs of treatment.
- 7 : Describe conditions that may complicate atopic dermatitis and discuss treatment options.
- 8 : Counsel parents and children regarding cause, course, treatment, and prognosis of atopic dermatitis.

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

- 1 : Differentiate acne from other similar-appearing conditions.
- 2 : Distinguish the clinical features that differentiate mild from severe acne.
- 3 : Describe factors that contribute to the development and severity of acne.
- 4 : Use topical medications that are effective in acne management (benzoyl peroxide, topical retinoids, topical antibiotics).
- 5 : Explain the role and possible side effects of systemic antibiotics in acne management.

6: Understand the role of hormonal contraceptives in the management of acne. 7: Implement a step-wise approach to the management of acne, including skin care, topical and systemic medications. 8 : Refer appropriate cases of acne to a dermatologist. 9: 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. 1 : Distinguish clinical features of hemangiomas: superficial, deep, mixed. 2 : Differentiate hemangiomas from other vascular phenomena. 3 : Counsel patients and families regarding the cause, course, and prognosis of hemangiomas. 64: Refer hemangiomas with features that signal potential complications (e.g., atypical appearance, periocular, perioral, large craniofacial, genital, multiple lesions, ulcerated, visceral hemangiomatosis). GOAL: Melanocytic nevi. Diagnose and refer important or worrisome changes in melanocytic nevi. 1 : Distinguish normal melanocytic nevi from atypical or dysplastic nevi and melanoma. 2 : Counsel patients and families regarding the cause, course, and prognosis of congenital and acquired melanocytic nevi and their potential malignant risk. 3 : Anticipate factors that may contribute to increased risk for malignant transformation in congenital and acquired melanocytic nevi. 4 : 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. 1 : Recognize the various clinical presentations of tinea capitis. 2 : Confirm the diagnosis of tinea capitis with appropriate laboratory testing. 3 : Differentiate tinea capitis from other similar-appearing conditions. 4: Manage tinea capitis, using medications at indicated dosages and durations, and monitoring for side effects of therapy. 5 : Prescribe prophylactic therapy with topical antifungal shampoos when

appropriate.

6 : 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.

- 1 : 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

GOAL: Pediatric Competencies in Brief (Dermatology). Demonstrate high standards of professional competence while working with patients under the care of a subspecialist.

Competency 1: Patient Care. Provide family-centered patient care that is development- and age-appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

- 1 :Use a logical and appropriate clinical approach to the care of patients presenting for specialty care, applying principles of evidence-based decision-making and problem-solving.
- 2 :Describe general indications for subspecialty procedures and interpret results for families.

Competency 2: Medical Knowledge. Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.

- 1 :Acquire, interpret and apply the knowledge appropriate for the generalist regarding the core content of this subspecialty area.
- 2 :Critically evaluate current medical information and scientific evidence related to this subspecialty area and modify your knowledge base accordingly.

Competency 3: Interpersonal Skills and Communication. Demonstrate

interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.
1 :Provide effective patient education, including reassurance, for a condition(s) common to this subspecialty area.
2 :Communicate effectively with primary care and other physicians, other health professionals, and health-related agencies to create and sustain information exchange and teamwork for patient care.
3 :Maintain accurate, legible, timely and legally appropriate medical records, including referral forms and letters, for subspecialty patients in the outpatient and inpatient setting.
Competency 4: Practice-based Learning and Improvement. Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate, and improve one's patient care practice.
1 :Identify standardized guidelines for diagnosis and treatment of conditions common to this subspecialty area and adapt them to the individual needs of specific patients.
2 :Identify personal learning needs related to this subspecialty; systematically organize relevant information resources for future reference; and plan for continuing acquisition of knowledge and skills.
Competency 5: Professionalism. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.
1 :Demonstrate personal accountability to the well-being of patients (e.g., following up on lab results, writing comprehensive notes, and seeking answers to patient care questions).
2 :Demonstrate a commitment to carrying out professional responsibilities.
3 :Adhere to ethical and legal principles, and be sensitive to diversity.
Competency 6: Systems-based Practice. Understand how to practice high-quality health care and advocate for patients within the context of the health care system.
1 :Identify key aspects of health care systems as they apply to

specialty care, including the referral process, and differentiate between consultation and referral.
2 :Demonstrate sensitivity to the costs of clinical care in this subspecialty setting, and take steps to minimize costs without compromising quality
3 :Recognize and advocate for families who need assistance to deal with systems complexities, such as the referral process, lack of insurance, multiple medication refills, multiple appointments with long transport times, or inconvenient hours of service.
6.95.6.4 :Recognize one's limits and those of the system; take steps to avoid medical errors.

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
Hair collection: tinea
Skin scraping
Sterile technique
Wood's lamp examination of skin

Source

Adapted from 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.