

# Dermatology

## Note:

The goals and objectives described in detail below are not meant to be completed in a single one month block rotation but are meant to be cumulative, culminating in a thorough and complete Pediatric Dermatology experience at the end of residency.

## **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.**

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. 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. 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. 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. 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.
<b>GOAL: Acne. Diagnose acne and manage mild to moderate cases.</b>
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.
<b>GOAL: Hemangiomas. Diagnose hemangiomas and manage uncomplicated cases.</b>
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).
<b>GOAL: Melanocytic nevi. Diagnose and refer important or worrisome changes in melanocytic</b>

<b>nevi.</b>
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.
<b>GOAL: Tinea capitis. Reliably diagnose tinea capitis and treat the condition appropriately.</b>
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.
<b>GOAL: Therapeutic Regimens in Management of Dermatologic Conditions. Proficiently use a variety of dermatologic treatment regimens in a logical, effective manner.</b>
<p>Properly use common dermatologic preparations, considering cost, convenience, efficacy, side effects and impact on growth and development. These include:</p> <ol style="list-style-type: none"> <li>1. Medication vehicle (ointments, creams, gels, lotions, solutions, foams, sprays)</li> <li>2. Topical steroids of varying potency and oral corticosteroids</li> <li>3. Topical T-cell immunomodulators</li> <li>4. Topical and oral antibiotics</li> <li>5. Topical and oral antifungals</li> <li>6. Topical moisturizers</li> <li>7. Topical retinoids</li> <li>8. Antihistamines</li> <li>9. Compresses with tap water, Domeboro, Burow's solutions</li> </ol>
<b>GOAL: Pediatric Competencies in Brief. Demonstrate high standards of professional competence while working with patients under the care of a subspecialist.</b>
<b>Competency 1: Patient Care.</b> 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.
<ol style="list-style-type: none"> <li>1. Use a logical and appropriate clinical approach to the care of patients presenting for dermatology care, applying principles of evidence-based decision-making and problem-solving.</li> </ol>
<ol style="list-style-type: none"> <li>2. Describe general indications for dermatology procedures and</li> </ol>

interpret results for families.
<b>Competency 2: Medical Knowledge.</b> 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 dermatology.
2. Critically evaluate current medical information and scientific evidence related to dermatology area and modify your knowledge base accordingly.
<b>Competency 3: Interpersonal Skills and Communication.</b> 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 dermatology.
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 dermatology patients in the outpatient and inpatient setting.
<b>Competency 4: Practice-based Learning and Improvement.</b> 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 dermatology and adapt them to the individual needs of specific patients.
2. Identify personal learning needs related to dermatology; systematically organize relevant information resources for future reference; and plan for continuing acquisition of knowledge and skills.
<b>Competency 5: Professionalism.</b> 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.
<b>Competency 6: Systems-based Practice.</b> 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 dermatology, including the referral process, and differentiate between consultation and referral.
2. Demonstrate sensitivity to the costs of clinical care in dermatology, 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.
4. Recognize one's limits and those of the system; take steps to avoid medical errors.

## Rotation Specific Competencies

### **Patient Care:**

1. Understands and weighs alternatives for diagnosis and treatment
2. Elicits subtle findings on physical examination
3. Obtains a precise, logical, and efficient history
4. Develops and carries out management plans
5. Competently understands/performs/interprets procedures:
  - \_\_\_\_\_ Skin Scraping
  - \_\_\_\_\_ Freezing Skin Lesions

### **Medical Knowledge:**

1. Is aware of indications, contraindications, and risks of commonly used medications and procedures
2. Applies the basic science, clinical, epidemiologic, and social-behavioral knowledge to the care of the patient

### **Interpersonal Skills and Communication:**

1. Creates and sustains therapeutic and ethically sound relationships with patients and families
2. Provides education and counseling to patients, families, and colleagues
3. Works effectively as a member of the health care team

### **Practice-based Learning and Improvement:**

1. Undertakes self-evaluation with insight and initiative
2. Facilitates that learning of students and other health care professionals

### **Professionalism:**

1. Is honest, reliable, cooperative, and accepts responsibility
2. Shows regard for opinions and skills of colleagues
3. Is responsive to needs of patients and society, which supersedes self-interest

### **Systems Based Practice:**

1. Applies knowledge of how to partner with health care providers to assess, coordinate and improve patient care
2. Advocates for high quality patient care and assists patients in dealing with system complexity

**References:**

1. American Board of Pediatrics, Content Specification, 2007
2. Ambulatory Pediatric Association
3. Association of Pediatric Program Directors
4. Pediatric RRC, January 2006

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