# **ALETHEA LEARNING SESSION RECAP**

"Doc, What's This Rash?" Common Dermatology Questions Answered Presented by Dr. Danya Traboulsi



DR. DANYA TRABOULSI

Dr. Traboulsi's presentation explored the diagnosis and management of several high-yield dermatological issues frequently encountered in primary care. The session covered:

- When to refer for patch testing in suspected allergic contact dermatitis.
- Evidence-based use of isotretinoin (Accutane) for acne management, including low-dose regimens.
- Clinical approach to viral exanthems
- Recognizing and managing longitudinal melanonychia (pigmented nail streaks).
- How to choose and counsel patients on topical corticosteroids for inflammatory skin conditions.

Throughout, Dr. Traboulsi emphasized practical strategies for primary care clinicians, the importance of patient-centered management, and when to seek dermatology consultation through eConsult platforms like Alethea.

# **KEY TAKEAWAYS FROM THE SESSION**

# **Patch Testing and Contact Dermatitis**

#### **Key Concepts**

- Contact dermatitis is an umbrella term encompassing:
  - Irritant Contact Dermatitis (ICD) (~80%)
  - Allergic Contact Dermatitis (ACD) (~20%)

ICD results from direct toxic damage to the skin barrier (e.g., excessive handwashing), whereas ACD is a type IV hypersensitivity reaction that occurs after sensitization to a chemical allergen.

## When to Suspect ACD

Contact dermatitis is an umbrella term encompassing:

- Chronic or localized eczema (especially on hands, face, eyelids, lips)
- Poor response or worsening with topical steroids
- Clear relationship with occupational exposure or new products
- Distribution pattern suggesting external triggers

**Key point:** Patients can develop new allergies even after long-term product use.



# **Patch Testing Overview**

- Gold standard for diagnosing ACD.
- Uses the North American Standard Series of ~80 allergens, tailored to patient exposures.
- Readings at 72 hours and 96 hours post-application.
- Results identify allergens and provide patients with educational resources for avoidance.

## **Challenges:**

- Allergen names are complex; results can overwhelm patients.
- Positive tests may not always be clinically relevant to their rash.

## **Common Allergens**

- Nickel
- Fragrance mix
- Preservatives: Methylisothiazolinone (MI), MCI, formaldehyde
- Occupational: Rubber accelerators, adhesives, cosmetics

# **Clinical Takeaways**

- Refer patients with chronic hand dermatitis, facial dermatitis, or treatment-resistant eczema for patch testing.
- Allow 6 weeks of allergen avoidance for skin to fully clear.
- Support with emollients and anti-pruritic measures during recovery.

# **Acne Management and Isotretinoin**

## **Indications**

Although approved for moderate to severe scarring acne, isotretinoin is beneficial for a broad range of acne severities, specially in patients unresponsive to topicals or oral antibiotics.

# **Low-Dose Therapy**

- Commonly prescribed 10–20 mg daily, with excellent tolerance and minimal monitoring.
- No routine labs required for doses ≤20 mg/day in healthy patients.
- Treatment continues until the patient is pimple-free for one month, rather than targeting cumulative mg/kg dosing.

#### **Monitoring and Safety**

- Baseline labs: ALT, lipid panel,  $\pm \beta$ -HCG for females.
- Side effects: Dry skin/lips (most common), myalgias, photosensitivity.
- Mood concerns: Evidence shows improvement in mood due to acne resolution; psychiatric risk is minimal.
- Pregnancy: Strictly contraindicated; two reliable contraceptive methods required for sexually active females.
  - Wait one month post-therapy before conception.
  - Not safe for breastfeeding.



# **Practical Tips**

- Start low to prevent flare-ups; consider short-term prednisone concurrently with isotretinoin initially for severe acne.
- Low-dose isotretinoin may be continued indefinitely for maintenance if pregnancy is not a concern.
- No age limit: Can be used safely even in elderly patients (e.g., rosacea or chronic acne).

#### **Clinical Pearls**

- Alberta's dry climate reduces tolerance to topical retinoids; isotretinoin offers a better longterm solution.
- Acne"relapses" are common but often milder; ~50% of patients remain acne-free longterm post isotretinoin treatment.

# **Viral Exanthems**

#### **Definition and Presentation**

- Viral exanthems are skin eruptions secondary to systemic viral infections.
- Common in children but also seen in adults.
- Typically blanchable, erythematous macules and papules, widespread on trunk and extremities.

#### **Common Causes**

- Summer/Fall: Non-polio enteroviruses
- Winter: RSV, influenza, parainfluenza, adenovirus
- Usually self-limited within two weeks.

#### When to Worry

- Mucosal erosions (oral, ocular, genital)
- · Painful rather than itchy rashes
- Toxic or unstable appearance

# **Differentiating from Drug Reactions**

• Drug eruptions typically appear **7–14 days** after initiation of the medication.

# Management

- Supportive care and reassurance.
- Topical corticosteroids for pruritus (e.g., Betaderm 0.1%).
- Antihistamines are only for sedation—ineffective for actual treatment of viral exanthems because they are non-histamine-mediated rashes.
- Counsel darker-skinned patients on possible post-inflammatory hyperpigmentation.



# **Longitudinal Melanonychia**

#### **Definition**

Pigmented streaks running along the nail plate due to melanin deposition in the nail matrix.

# **Benign vs Malignant Causes**

- Benign: Common in individuals with darker skin tones, trauma, drugs (e.g., Plaquenil), pregnancy, or post-inflammatory changes.
- Malignant: Nail melanoma rare (0.7–3.5% of melanomas).

# **Red Flags for Melanoma**

- Involvement of one digit (especially thumb or great toe)
- Irregular or multicolored pigmentation
- Width >3 mm
- Hutchinson sign (pigment extends onto the cuticle)
- Change in size, shape, or colour over time

## **Approach**

- If multiple nails are involved → benign.
- Children: Often congenital; monitor every 3–12 months.
- Adults with new lesions: Refer for nail matrix biopsy to rule out melanoma.

# **Choosing the Right Topical Corticosteroid**

# **Principles**

- Consider age, anatomic location, and patient adherence.
- Ointments are most potent and effective but less cosmetically appealing.
- **Potency** ≠ **percentage** strength varies by molecule, not concentration.

# **Potency Guidelines**

- Low-potency: Face, intertriginous areas, infants.
- Medium-potency: Trunk and limbs.
- High/very high potency: Palms, soles, thick plaques.

# **Clinical Application**

- Treat flares until smoothness returns, not until color normalizes.
- Step down to non-steroid agents (e.g., Protopic, Elidel) for maintenance.
- Avoid under-treatment, which prolongs inflammation and risk of flare.

## **Prevention Strategy**

- Protopic (Tacrolimus): approved for Mild -Moderate eczema, or twice-weekly for prevention; 0.03% concentration for 2-16 yo; 0.1% for 16 and up
- Elidel (Pimecrolimus): approved for Mild eczema, safe from 3 months of age and up



# On "Steroid Withdrawal Syndrome"

- Not an accepted diagnosis within the dermatology community
- Often seen in eczema social media groups and steroid phobic individuals as a diagnosis
- Educate patients on intermittent, appropriate steroid use combined with preventive nonsteroidal options.

# **Key Takeaways**

- Patch testing is invaluable for chronic or atypical dermatitis.
- Low-dose isotretinoin is safe, underutilized, and requires minimal monitoring.
- Viral exanthems are benign and self-limiting—focus on reassurance.
- Single-digit melanonychia if changing or widening warrants biopsy to exclude melanoma.
- Topical steroid potency and patient preference determine treatment success.

