What’s New in Dermatology

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Introductions

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Disclosures:
none relevant for this talk

- Abbott Laboratories
- Astellas Pharma Inc.
- Galderma
- Graceway
- GSK-Stiefel
- Jannsen
- Leo Pharma Inc.
- Pfizer-Amgen
- Valeant/Sanofi-Aventis/Dermik/Canderm
"What I wouldn't give for some good eczema medication!"
Ceramide-Based Moisturizers

- Appears that disturbances in epidermal lipid compartment structures (esp. ceramides) account for the defects in barrier function of atopic dry skin.

- Ceramides are reduced in all atopics, particularly during a flare.

- Use of topical ceramides on a regular basis reduces need for topical steroids.

- In Canada, only 3 OTC ceramide-containing products:
  - Impruv® (cream)
  - Cetaphil Restoraderm™ (lotion)
  - Curel Advanced Ceramide Therapy
  - Cerave (cream, lotion, cleanser)

- By prescription: EpiCeram (approved Sept. 2009)
  - great safety profile & no restrictions of use.
New Vehicles

- Foams have arrived, more are coming.
- Verdeso (desonide) foam
  - Petrolatum-based emulsion foam (moisturizing effect)
  - Mild-moderate atopic dermatitis $\geq$ 1y.o.
Topical tacrolimus (Protopic 0.03% & 0.1% ointments) and pimecrolimus (Elidel cream) are used to treat patients ≥2 years of age with eczema.

Topical calcineurin inhibitors are especially helpful when sensitive areas like face/neck/groin/axillae are involved.

Used twice per week, topical tacrolimus has been shown to be an effective way to prevent, delay and reduce occurrence of atopic dermatitis exacerbations.

References:

Chronic Hand Eczema

- Basilea has launched Toctino® (alitretinoin), an oral retinoid for chronic hand eczema.
- 10 & 30mg capsules; start at 30mg/day with meal.
- Similar contraindications as isotretinoin.
- For patients with severe chronic hand eczema refractory to potent topical steroids, ~ 50% will respond with good success to Toctino® 30mg/day.
"Good news - it's not psoriasis... it's just an itchy trigger finger."
What’s New in Psoriasis - Topicals

- New topical vehicles & formulations:
  - Clobex® spray/lotion/shampoo – effective, and with elegant vehicles likely increase compliance
  - Xamiol® gel – identical to Dovobet, but a gel rather than ointment and so great treatment for scalp
  - Silkis® ointment (calcitriol) – non-steroid option (biologically active metabolite of vitamin D₃), similar to Dovonex® (calcipotriol), but less irritating for sensitive areas
  - Foams coming!
What’s New in Psoriasis - Biologics

- Lots of Biologics !!
- Raptiva (Efalizumab) – pulled from market due to PML.
- Briakinumab – great results, but increased MACE; pulled
- Amevive (Alefacept) - 15mg IM once weekly; uncommonly used
- Remicade (Infliximab) - 5mg/kg IV infusion q 2months
- Enbrel (Etanercept) – 50mg SC twice weekly
- Humira (Adalimumab) – 40mg SC q 2 weeks
- Stelara (Ustekinumab) – 45mg SC q 3 months
What’s New in Psoriasis - Biologics

- Reduced dosing frequency.
- TNF-inhibitors help psoriasis & psoriatic arthritis.
- Stelara (Ustekinumab) is the newest biologic, and is a first in class human monoclonal antibody selectively targeting the cytokines IL-12 & IL-23.
- ODB Coverage: Enbrel, Humira, Stelara.
- Pricy: approximately $20-25,000 per year.
Allergic Contact Dermatitis

Allergens of the Year:

- 2011: Dimethyl Fumarate
- 2010: Neomycin
- 2009: Mixed dialkyl thioureas (neoprene rubber)
- 2008: Nickel
- 2007: Fragrance
- 2006: P-Phenylenediamine (PPD)
- 2005: Corticosteroids
I'm giving you a course of antibiotics.

An alternative Medicine man.
What’s New in Acne & Rosacea

- Acne: New Treatment Combination - Tactuo
  - 2.5% Benzoyl peroxide & Differin 0.1%.

- Biacna gel
  - 1% Clindamycin + 0.025% tretinoin

- Aczone
  - 5% Dapsone

- Diet may affect acne:
  - Acne worse in those consuming dairy and high glycemic diets.

- Azelaic acid 15% (Finacea®) came to market in summer of 2010 for rosacea by Bayer.
  - Ideal for papulopustular rosacea, but also reduces erythema
  - Main effect due to anti-inflammatory properties
  - Bid; 50gm tube

- Subantimicrobial dose antibiotics for Rosacea and Acne – widely available in U.S. (e.g. Oracea), soon to Canada.
Metvix - Actinic Keratoses

- Photodynamic therapy for: Actinic keratoses, BCCs, Bowen’s disease. Traditionally using Blu-U.

- Topical application of Metvix® cream (registered in 30 countries) results in the selective accumulation of photoactive molecules in the neoplastic tissue; exposure to red light in the presence of oxygen generates reactive oxygen species which kill neoplastic cells. Healthy surrounding tissue is spared.

- Active ingredient in Metvix® cream is methyl aminolevulinate (MAL), a topical photosensitizer molecule that permits effective topical photodynamic therapy.

- Aktilite® is an LED light source specifically designed for Metvix because of its 634nm wavelength.

- Main issue: cost/coverage.
Vyloma for Genital Warts – 3.75% Imiquimod

- Aldara (imiquimod 5%) has been used since 1997 when 3M brought it to market, & Graceway Pharmaceuticals now owns.
- Approved and used for treating actinic keratoses, superficial BCCs, and external genital warts; many off-label uses (e.g. SCC in-situ, other warts, molluscum).
- Zyclara™ is a new 3.75% formulation.
- Lower concentration should mean better tolerability and thus compliance.
- Also, easier dosing schedule with 2 weeks on, 2 weeks off, then 2 weeks on again. “2, 2, 2” regimen.
- Appears to have similar equivalence to 5% at this dosing schedule for AKs.
HPV: cause of AK & SCC

- A leading dermatologist-researcher Dr. Eggert Stockfleth and his lab in Berlin has demonstrated that HPV 21 can be found in 95% of actinic keratoses (AK) and 100% of squamous cell carcinomas (SCC); less commonly, HPV 5 & 8 have also been associated.

- The need for immunomodulation using agents such as topical imiquimod (approved for treating HPV & AKs) makes even more sense now.
I'm sorry, David, but it's... well... it's that hair on your chinny-chin-chin...
Unwanted Facial Hair

- Vaniqa® (Eflornithine 13.9%) back on market
  - Irreversible inhibitor of ornithine decarboxylase which is a rate-limiting enzyme. Inhibition results in slowed hair growth.

- Apply bid to unwanted facial hair; 30gm tube.

- Works well in combination with laser hair removal techniques.

- 20% of women at least once weekly will tweeze/shave/wax/bleach hair.
Injectable Dermal Fillers

- Hyaluronic acids – Restylane & Perlane, Juvederm, Teosyal, Ovita
  - Last 4-12 months depending on location injected

- Calcium Hydroxyapatite (naturally found in bone) – Radiesse
  - Stimulates body’s natural collagen production
  - Deeper injection; lasts 12-18 months

- PMMA Microspheres - Artesense
  - Considered a permanent injectable implant
  - Lasts 5-10 years

- Evolence – taken off market

- New: not widely used
  - Beautical (polyacrylamide) – 2-4 years
  - Bio-Alcamid (polyacrilimid) - permanent
New Botulinum Toxins

- Botox® – 20 years of approved use in Canada
  - Originally approved March 14, 1990 for Strabismus & Blepharospasm

- New toxins to market:
  - Xeomin® (incobotulinumtoxinA) – Merz Pharma Canada
  - Dysport™ (abobotulinumtoxinA) - Medicis

- Vast array of uses:
  - Wrinkles
  - Hyperhidrosis
  - Blepharospasm
  - Cervical dystonia
  - Migraines, tension headaches
  - Cerebral palsy
  - Post-stroke spasticity
  - Club foot
  - Raynaud syndrome
IT COULD WELL STAND FOR - LATEST ADVANCE FOR SURGEON TO ENHANCE REVENUE
Lasers

- Fractionated lasers (e.g. Profractional, Fraxel) provide excellent option for laser resurfacing for: aging face, acne scarring, melasma.
- Safer than traditional CO$_2$ laser resurfacing by using microthermal zones, leaving areas of normal skin for better healing.
Lasers

- Many non-invasive treatments now developed to treat unwanted fat – show modest results, & unlikely to replace tumescent liposuction.

- **Ultrashape** is an ultra-sound based device using selective focused ultrasound to produce mechanical, nonthermal, acoustic effects which target & selectively disrupt fat cells.

- **Zeltiq** has developed “cryolipolysis” which employs cold for fat reduction. The device is pressed against the area to be treated; the body reacts to the cold with inflammation and the body disposes of the damaged fat cells.

- No anesthesia, no recovery time; good for stubborn areas of fat.

![Before and After Images](image1.jpg)

**Single-Treatment Results**

**Lateral Thighs**

*Reduction: 4.0 cm*

*Courtesy of Dr. Jacques Otto*

![Before and After Images](image2.jpg)

**Single-Treatment Results**

**Flanks**

*Reduction: 2.6 cm*

*Photos courtesy of Dr. John Burns*
YOU'RE FAT
Don't try and sugar coat it because you'll eat that too
Fat Removal

- Sodium deoxycholate by Kythera injected into submental fat ("mesotherapy") is quite helpful; coming to market in near future.
Thank you!

"I think it's damn unprofessional for a dermatologist to scream 'Yikes' like that."