EMERGING TREATMENTS IN THE TREATMENT OF SKIN AND MUCOSA

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ACNE

- Acne vulgaris is a common chronic skin disease involving blockage and/or inflammation of pilosebaceous units (hair follicles and their accompanying sebaceous gland).
- Acne can present as noninflammatory lesions, inflammatory lesions, or a mixture of both, affecting mostly the face but also the back and chest.
ACNE

An equal opportunity nuisance
1. Oral antibiotics – not a good long term solution, how long
2. Isotretinoin – what, why, and why are parents pushing back?
3. Monotherapy or just one topical medication is not usually recommended to treat active acne
4. Benzoyl peroxide – it’s and oldie, but a goodie
5. Antibiotic topicals – combination, combination, combination
6. Anti inflammatory – for cosmetic improvement and comfort
7. Retinol – for EVERYONE
IF IT AINT CHEAP…

- PurGen Pharmacy – GenRx Connect
- GenRx2U.com
- Or 1-844-436-7928
- Commercially insured patients - $0
- All others uninsured - $25

- Adapalene (Differin)
- BenzePrO foaming cloths and creamy wash
- Clindamycin Phosphate topical 1%
- Doxycycline Hyclate and Monohydrate
- Minocycline
- Tazarotene cream 0.1%
WOMEN: SHAMPOO FOR DRY DAMAGED HAIR

MEN: 6 IN 1 SHAMPOO FOR FACE, HAIR, BODY, FLOOR, CAR, DISHWASHER
DOXYCYCLINE

- IN GENERAL, GUIDELINES RECOMMEND 3-6 MONTHS OF THERAPY WITH CONCOMITANT TOPICAL RETINOID
- Take it with food despite the label, why?
- IN THE PIPELINE – THERE ARE ONGOING STUDIES THAT ARE TRIALING OMEPRAZOLE FOR THE TREATMENT OF ACNE IN PLACE OF DOXYCYCLINE: in vitro antibacterial effects against staphylococcus aureus and anti-androgen that can be potential treatment of acne vulgaris.
Mechanism of action: Tretinoin is a metabolite of vitamin A that binds with high affinity to specific retinoic acid receptors located in both the cytosol and nucleus. Tretinoin activates three members of the retinoic acid (RAR) nuclear receptors (RARα, RARβ, and RARγ) which act to modify gene expression, subsequent protein synthesis, and epithelial cell growth and differentiation. It has not been established whether the clinical effects of tretinoin are mediated through activation of retinoic acid receptors, other mechanisms, or both. Although the exact mode of action of tretinoin in acne treatment is unknown, current evidence suggests that topical tretinoin decreases cohesiveness of follicular epithelial cells with decreased microcomedone formation. Additionally, tretinoin stimulates mitotic activity and increased turnover of follicular epithelial cells causing extrusion of the comedones.

Relatively similar MOA as Retin A or tretinoin, but may be better tolerated due to the vehicle.

Let’s talk receptor sites and routine…
WE ARE AN IMMEDIATE GRATIFICATION SOCIETY

But this is America! I want it now!
FOREVER CLEAR BBL

TREATMENT 1: 420 NM FILTER, 6 J/Cm², 240 MS, 15 °C COOLING, 3 PASSES; 560 NM FILTER, 15 J/Cm², 15 MS, 20 °C COOLING, 1 PASS

TREATMENT 2: 420 NM FILTER, 7 J/Cm², 240 MS, 15 °C COOLING, 3 PASSES; 560 NM FILTER, 15 J/Cm², 15 MS, 20 °C COOLING, 1 PASS

TREATMENT 3: 420 NM FILTER, 4 J/Cm², 240 MS, 15 °C COOLING, 3 PASSES; 560 NM FILTER, 15 J/Cm², 15 MS, 20 °C COOLING, 1 PASS
FOREVERCLEAR® BBL
SCARS AND SCAR MANAGEMENT: HALO AND MICRONEEDLING
FOREVERCLEAR® BBL
Forever Clear BBL™

Parameters:
1st pass 420 nm filter, 5 J/cm², 150 ms, 50% overlap, 15 °C cooling, 2 passes
2nd pass 560 nm filter, 15 J/cm², 180 ms, 50% overlap, 15 °C cooling, 3 passes

BEFORE / AFTER | One month post 9 tx | courtesy of Brooke Bangart, National Laser Institute
FOREVERCLEAR® BBL
CHEMICAL PEELS, OXYGENEO, SILK PEEL DERMALINFUSION
WHY DERMALINFUSION?

3-IN-1 TECHNOLOGY SIMULTANEOUSLY

EXFOLIATES REMOVAL OF DRY, DAMAGED SKIN CELLS

EXTRACTS DEEP CLEANSING OF SKIN SURFACE AND Pores

INFUSES DELIVERY OF CONDITION-SPECIFIC SERUMS DEEP INTO THE SKIN

VOLUMIZES SKIN BY 70%
GENERAL CARE

- Washing your face twice daily and after working out
- Moisturizing
- Following treatment instructions
- Balanced diet
- Sanitizing sports equipment
- Keeping hands away from acne prone areas
- Hydration
- Sunscreen, sunscreen, sunscreen
DIVA FOR WOMEN

A NEW APPROACH TO VAGINAL WELLNESS
WHAT ARE THE PROBLEMS? WHY ARE THEY OCCURRING?

- Pre and postmenopausal women are looking for solutions
  - 25 million women agonize over urinary incontinence
- Prevalence of stress urinary incontinence in general populations reported in 13 different studies
  - Young adult, 20% to 30%
  - Middle age, 30% to 40%
  - Elderly, 30% to 50%
- Body changing events
  - Vaginal childbirth
  - Menopause
As many as 1 in 3 adults—more than 80 percent of them women—have bladder control issues.
## VAGINAL ATROPHY

<table>
<thead>
<tr>
<th>Vaginal dryness ranges from about 4% in early premenopausal to 47% in late postmenopausal(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In postmenopausal phase, prevalence is close to 50% due to decreasing levels of estrogen(^2)</td>
</tr>
<tr>
<td>• In subgroups such as breast cancer survivors, vaginal dryness is present in 23.4% of premenopausal patients and in 61.5% of postmenopausal patients(^3)</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Dyspareunia affects 10-20% of US women and varies by age group(^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Post partum dyspareunia is underreported, 41% and 22% at 3 &amp; 6 months post(^5)</td>
</tr>
<tr>
<td>• Dyspareunia is a common presenting symptom in women with vaginal atrophy(^6)</td>
</tr>
</tbody>
</table>
FACTORS THAT AFFECT VAGINAL HEALTH

- Childbirth stretches the vaginal canal and surrounding tissues
- Tissue injury is magnified if labor or delivery is difficult or prolonged
- Relaxation or atrophy of vaginal walls and surrounding tissues can lead to diminished vaginal health and function
MENOPAUSE

- May lead to reduced estrogen production by the ovaries
  - Also a hysterectomy, chemotherapy, or the process of breast-feeding
- Often leads to thinning, drying and inflammation of the vaginal walls
- For many women, vaginal atrophy decreases healthy vaginal function and a reduced quality of life
- Vaginal atrophy is now called Genitourinary Symptoms of Menopause (GSM)
SYMPTOMS OF GSM

- Vaginal dryness
- Burning
- Vaginal discharge
- Genital itching
- Burning with urination
- More urinary tract infections
- Urinary incontinence
- Dyspareunia – discomfort with intercourse
- Light bleeding after intercourse
- Decreased vaginal lubrication during sexual activity
- Shortening and tightening of the vaginal canal
COMMON TREATMENT OPTIONS

- Physical Therapy
- Drugs
- Injections
- Surgical
  - Slings
  - Colposuspension
- Devices (inserted)
GSM TREATMENT OPTIONS

- **Non-hormonal treatments**
  - OTC vaginal lubricants
    - Reduce discomfort during intercourse
  - OTC vaginal moisturizers
    - Apply every 2-3 days, effects last a little longer than lubricant

- **Low-dose vaginal estrogen**
  - Rings, creams (messy!), suppositories, and tablets
  - Effective at low doses and limits exposure to estrogen; may provide direct relief of symptoms

- **Systemic estrogen therapy**
  - Administered orally, vaginally, or transdermally via injection or nasal spray
  - Concerns about long-term potential of estrogen to increase risk of breast and endometrial cancer
WHY DIVA

SCITON JOULE
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
</table>
| HFL          | More treatment options  
Tune ablation and coagulation  
Customize per patient needs                                               |
| Speed        | High Precision Automation makes treatment time 5 min  
Fit a quick procedure into a busy day                                         |
| Comfort      | Stationary Strengthened Quartz Dilators (SQDs) allow for a comfortable treatment  
More positive patient experiences                                            |
| Safety       | Single-use SQDs remove cross-contamination risk  
Patient safety always comes first                                               |
| Multi-Platform | JOULE is the total aesthetic solution including Halo, BBL, Hair Removal, Skin Firming, etc.  
Multi-platform systems can offer multiple treatments without changing rooms or devices. |
WHY DIVA?

- Only Hybrid Fractional Laser (HFL) technology for laser vaginal therapy
  - Dual wavelength system
  - Can use lasers separately or as hybrid ablation and heating
- Fast, easy, effective, comfortable
- World’s first fully automated handpiece
  - Turns a 20 min procedure into 5 min!
  - Reduces treatment variability due to users
- 360 degree safeguard window
  - Hygienic, single-use Strengthened Quartz Dilators (SQDs)
  - Every laser pulsed through new region of window
WHAT IS HIGH PRECISION AUTOMATION (HPA)?

- Motorized control system
  - Footswitch controls rotation and automatically delivers laser pulses
- Advantages
  - Comfortable, predictable results
  - Limits user and treatment variability
  - Significantly decreases treatment time (3-6 min)
STRENGTHENED QUARTZ DILATORS (SQDS)

- Single-use dilators
  
  SIZE
  Expands vaginal canal for increased treatment area
  - Tip Length of 5.5"
  - Diameter of 1"

  HYGIENIC
  Act as barrier between patient and handpiece
BENEFIT OF SQDS

- Efficient
  - Every pulse delivered through new zone in strengthened quartz tip
- Hygienic
  - No risk of cross contamination
- Equipment stays consistent
  - Reprocessing can alter the surface of metal, lenses, and mirrors, which can degrade the handpiece
PATTERN COMPARISON

Competing Laser Pattern Treating Every 60 degrees

diVa Laser Pattern Treating 360 degrees
diVa keeps the vaginal canal expanded
<table>
<thead>
<tr>
<th>Company</th>
<th>Product</th>
<th>Type</th>
<th>Tx Time (min)</th>
<th>Automated?</th>
<th>Dilator?</th>
<th>Disposable?</th>
<th>Expandable Platform?</th>
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<tbody>
<tr>
<td>Sciton</td>
<td>diVa</td>
<td>HFL</td>
<td>5</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Alma</td>
<td>FemiLift</td>
<td>CO₂</td>
<td>10 - 15</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>DEKA</td>
<td>MonaLisa Touch</td>
<td>CO₂</td>
<td>5 - 10</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Fotona</td>
<td>IntimaLase</td>
<td>Er:YAG</td>
<td>20</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Lumenis</td>
<td>FemTouch</td>
<td>CO₂</td>
<td>5 - 10</td>
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<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Syneron</td>
<td>CO2RE Intima</td>
<td>CO₂</td>
<td>15</td>
<td>No</td>
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<tr>
<td>Thermi</td>
<td>ThermiVA</td>
<td>RF</td>
<td>20 - 25</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Limited</td>
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</table>
WHO IS NOT A GOOD CANDIDATE FOR THIS PROCEDURE

Pregnant or lactating
Active yeast, bacterial, or viral infection
Known collagen disorder, vascular disease, history of bleeding disorder

Severe vaginal atrophy
Moderate to severe pelvic organ prolapse
Urinary tract infections
Undiagnosed pelvic pain or dyspareunia
Recent vaginal surgery
History of rectovaginal or vesicovaginal fistula
TREATMENT RECOMMENDATIONS

3 procedures every 4-6 weeks

Maintenance procedure on as needed basis

No sedation necessary
   Local anesthetic recommended
TREATMENT ANIMATION
Treatment Post-Care

Patients:

• Can immediately return to work and normal life routine, with a few exceptions

• Should refrain from vaginal penetration for up to 48 hours, included by not limited to
  • Sexual intercourse for 48 hours
  • Douching
  • Use of tampons

• May experience
  • Spotting, pinkish colored discharge
  • Mild cramping
  • Sunburn-like feeling
BEFORE AND 3 MONTHS POST 3 TREATMENTS

Photos courtesy of Johnny Peet, MD
If you have questions, we have answers. Give us a call at [insert phone number] and schedule your consultation today. We have weekend and evening hours 😊
