# WELCOME Addressing Acne



By Dave Waggoner Director of Education Skin Script Skin Care



## About the Presenter...

- Licensed Aesthetic Instructor
- Licensed Aesthetician
- Licensed Massage Therapist
- Certified Yoga Instructor
- M. A. in Education
- Passion for all things skin care!

## Today's Webinar covers...

- A review and discussion of the pathology of acne.
- Rethink the systems involved in the complex issue of acne.
- Treatment series suggestions for acneic skin.





#### The thing about Acne...

#### There are many different viewpoints on acne and acne treatments.

#### The condition of acne can be quite perplexing.

Based in skin texture issues. Skin secretions come into play and should be evaluated. Hormones play a huge role. Acne treatments should address the multiple symptoms.

#### Acne is typically a culmination of altered skin processes:

Hyperkeratinization (slowing of desquamation) Sebum that has been trapped in the follicle (sebocyte deficiency) Displacement of the P. Acnes bacteria Impaired Acid Mantle (loss of integrity of the protective barrier) Inflammation due to disruption of normal process



**Contributors factors of Acne...** 

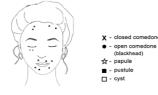
# STRESS!!!

INTERPERSONAL/MENTAL/EMOTIONAL "LIFE" STRESS ENVIRONMENTAL STRESS (WORK/PLAY LIFESTYLE) EXTREMES OF CLIMATE. UVA/UVB/UVC RADIATION SMOKING EXCESSIVE EXFOLIATION EXCESSIVE WASHING IMPROPER USE OF PRODUCTS NUTRITIONAL CHOICES ALCOHOL LACK OF SLEEP

## Grades of Acne Grades 1 & 2

**Grade 1**: Mild acne. Open and closed comedones scattered over less than half the areas of the face and back.

**Grade 2**: Moderate acne that has an increased number of open and closed comedones as well as an occasional papule or pustule.



## Grade 3 & 4

**Grade 3**: Moderately severe acne. Numerous closed comedones, papules, pustules, and occasional cysts. Red and inflamed. Scarring is evident.

**Grade 4:** Severe acne. Numerous pustules and papules and large numbers of cysts on face, chest and back. Covers more than 50% of face.





### Anatomy of the Pilosebaceous Unit:

Sebaceous glands are lobe-like structures and have ducts which allow sebum to travel up the hair shaft to the surface of the skin.

Most numerous on the T-zone of the face. Also across the shoulders. Large sebaceous glands on the scalp.

Sebaceous gland cell: Sebocyte. Life span of 14 – 20 days.



## The Sebocyte:

#### **Sebaceous Gland:**

**Sebocyte**: the cell that makes up the lining of the sebaceous gland.

The **sebocyte** ultimately produces **sebum** which is mostly triglycerides.

**Cellular debris**: comes from poor quality cell membranes of the sebocyte. This debris causes the slowing of sebum.

Remember the **acid mantle** is made of sebum, free fatty acids, sweat and has an acidic pH of 5.5

#### A closer look at the sebocyte:



## **Oxidative Stress and Lipid Peroxidation**

### **Oxidative Stress**

Oxidative Stress is the loss of both oil and water soluble antioxidants within the cell environment/ membrane (too many free radicals in the skin).

Vit. E abounds in quantity, but is a poor antioxidant and can only neutralize a small number of free radicals before becoming inactive.

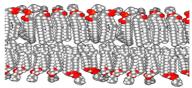
Vit. E is reactivated by Vit. C; and therefore without Vit. C the cell has lost an important antioxidant (Vit. E) leading to Oxidative Stress that leads to lipid peroxidation.

## **Lipid Peroxidation**

A compounded and untreated form of Oxidative Stress.

The loss of oil soluble antioxidants (e.g., Vit E) can lead to a cell membrane that is rigid. This will lead to more serious cellular damage:

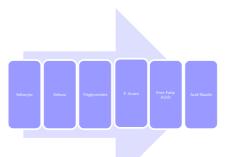
- Cell Membrane
- Interior of the Cell



## P. Acnes bacteria

## What does P. acnes do?

Propionibacterium acne Lives without oxygen Digests/converts sebum (triglycerides) Free Fatty Acids Acid Mantle



## Q: What happens if the eco-system and food source (a.k.a. the Acid Mantle) is disrupted?

A: The P. Acnes bacteria migrates down into the follicle to find triglycerides. P. Acnes is not meant to be there and causes inflammation of the follicle wall. Inflammation leads to white bloods migrating to the area and acne ensues.

## Home Care

- Prepares and maintains the skin before, during and after professional treatments.
- Home care provides smaller amounts of the ingredients used in professional treatments.
- Glycolics and retinols exfoliate to eliminate dead skin cells so the active ingredients of kojic and arbutin can penetrate the skin more effectively; hence, <u>a more effective professional treatment.</u>
- Proper moisture levels in the epidermis help the enzymatic processes occur at the proper rate.
- Active ingredients within the homecare further client satisfaction and ultimately your success.
- SPF is critical at all times as sun exposure stimulates melanin production.

## **Excess keratinization:**

Looks like closed comedomes or pustules; cap of skin over the follicle.

Build up of dead cells:

Inadequate desquamation rate

Lack of free water Rapid rate of TEWL.

Poor alignment of lipid bi-layers.

Excessive surface dryness Harsh cleansers (BPO) (Too many Free Fatty Acids are problematic for oily skin.)





# Closed Comedones



## Acne Prone Skin with Blackheads:

- Blackheads result when a pore is only partially blocked, allowing some of the trapped sebum, bacteria, and dead skin cells to slowly drain to the surface.
- A blackhead tends to be a stable structure, and can often take a long time to clear.
- Blackheads, also known as open comedones.
- The key to skin care for acne is consistency.
- Discussion on blackheads/open comedones and the sebocyte.

#### **Coconut and Papaya Fruit Enzymes**

- Pure fruit enzymes, no chemical exfoliants added
- Sensitive, rosacea, normal skin.

#### **Pomegranate:**

- 11% Lactic
- Hydrating
- 2% Salicylic
- Great for pore refinement and acne.
- This enzyme is warm! Let your clients know!



SKIN SCRIPT

## Acne Prone/Oily/Blackhead Treatment Protocol (space these 1-4 weeks apart depending on severity)

Tx. 1	Tx. 2	Tx. 3	Tx. 4	Tx. 5	Tx. 6
Evaluative Facial (Blueberry Enzyme)	In office treatment:	In office treatment:	In office treatment:	In office treatment:	In office treatment:
Start client on Homecare	Blueberry Enzyme Treatment (with	Pomegranate Enzyme Treatment (with	Blueberry Enzyme Treatment (with	Blueberry Enzyme Treatment	Blueberry Enzyme Treatment (with
See below	optional layer of retinol scrub) with Extractions	optional layer of retinol scrub) with Extractions	optional layer of retinol scrub) with Extractions	(with optional layer of retinol scrub) with	optional layer of retinol scrub) with Extractions
•	- Homecare long t	erm (throughout tre	eatment and to mair	Extractions ntain afterwards)	
	ild Acne Kit; the a me and seen eve		ould be modified f	or young client t	o a

**Adult:** Green Tea Cleanser, Glycolic Cleanser, Retinol Scrub, Cucumber Toner, Ageless Hydrating Serum, Vitamin C, Ageless Moisturizer, SPF

## **Pustular acne:**

- Inflammatory skin condition.
- Closed comedone with bacteria living in the follicle leading to white blood cells coming into the pore creating pus.
- Excess secretion of oil by the sebaceous glands block the skin pores, which over time lead to infections and swelling.
- Onset of puberty is often marked by outbreaks. Adults affected as well.
- Proper treatment is imperative to minimize the risk of scarring and other skin complications.
- Stress management and consuming a healthy diet are also important.

#### **Passionfruit Enzyme:**

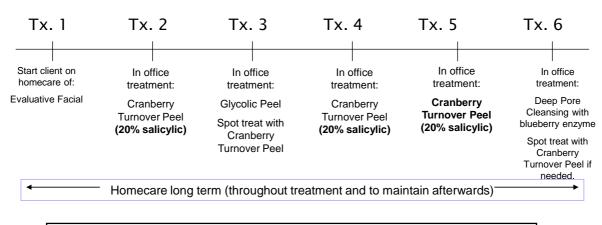
- Passionfruit, Kollaren, Rapeseed Oil, Noni Fruit:. Rapeseed is softening and noni fruit is an antioxidant.
- Kollaren is a peptide to create dermal warming to stimulate collagen production to firm the skin.

#### **Cranberry Turnover Peel:**

- Cranberry Fruit (cream base)
- 20% Salicylic Acid: Exfoliates dead skin cells – dries oil and refines/closes pores.
- Will be a stimulating (hot) peel and will cause flaking and peeling.

## Pustular Acne Treatment Protocol

Spacing of treatments to be determined by esthetician



Homecare: Mild Acne Kit (or Moderate Acne Kit depending on severity)

18

SKIN SCRIPT





#### 28

## Papular acne (displaced bacteria):

- Lesion is the result of inflammation in the pore's walls, papules may appear to be different because they do not contain pus or sebum.
- Papular acne is a form of inflammatory acne.
- Papules specifically result from P. acnes bacterial converting triglycerides into free fatty acids in the follicle, which results in inflammation.
- Acne papules do not appear to have a head or contain pus. The areas tend to be hardened, raised and pink or red due to inflammation.
- Don't pick! By squeezing or picking at the skin, you can damage the collagen and elastin fibers underneath the epidermal layers of skin.



## Papular Acne Treatment Protocol (might be spaced 2-4 weeks apart)

Tx.	1	Tx. 2	Tx. 3	Tx. 4	Tx. 5	Tx. 6
Start clier	e of:	In office				
homecar		treatment:	treatment:	treatment:	treatment:	treatment:
Evaluative	are:	Enzyme	Enzyme	Enzyme	Enzyme	Enzyme
Homeca		Treatment with				
Sensitive		Coconut/Papaya	Coconut/Papaya	Coconut/Papaya	Coconut/Papaya	Coconut/Papaya

Homecare long term (throughout treatment and to maintain afterwards)

#### Homecare:

Pomegranate or Green Tea Cleanser, Retinol Scrub (used gently 2 times per week), Cucumber Toner, Ageless Hydrating Serum, Vitamin C, Ageless Moisturizer, SPF

22

SKIN SCRIPT"

## Hormonal related acne:

- Many women visit a dermatologist to get suppression of hormonal acne.
- There are several times in our lives when our hormones can become unbalanced and wreak havoc, including puberty, pregnancy, menopause, and any other time they feel like it.
- Acne may be precipitated by androgens, male hormones present in both men and women.
- Doctors sometimes prescribe low-dose birth control pills and/or androgen receptor blockers to reduce blemishes by keeping androgens steady.
- Need androgen-like inhibitors, which are azelaic, zinc and b-6. (TCA peel, SPF, and multi-vitamins)

## **10% TCA Depigmentation** Peel: TCA (tri-chloracetic acid)

Re-textures skin (keratolytic acid) will receive peeling effect based on number of layers applied)

#### Azelaic, Arbutin and Kojic

Not your traditional TCA-it will not penetrate as rapidly as a traditional TCA; it is controllable and very effective for Fitzpatrick Type: 1-6

Oily, <u>acneic skin</u>, Hyperpigmentation and melasma.



23

## Hormonal related acne:



# Hormonal Acne Treatment Protocol (spacing of treatments is to be determined by esthetician)

Tx. 1	Tx. 2	Tx.3	Tx. 4	Tx. 5	Tx. 6
Start client on homecare of: •See below	In office treatment:	In office treatment: Glycolic Peel	In office treatment: 10% TCA	In office treatment: 10% TCA	In office treatment: 10% TCA
•Glycolic Peel (no or minimal downtime)	Glycolic Peel (no or minimal downtime)	(no or minimal downtime)	Depigmentation Peel: 1-2 layers	Depigmentation Peel: 1-2 layers	Depigmentation Peel: 4-8 layers
	Spot treat with Cranberry Turnover	Spot treat with Cranberry Turnover	Minor flaking for 3-4 days	Minor flaking for 3-4 days	8-10 day mediur depth peel
•	Homecare long t	erm (throughout tr	eatment and to mai	ntain afterwards)	•
	ld Acne Kit; the a seen every week a		uld be modified fo with TCA peels.	or young client to	a coconut

**Adult:** Green Tea Cleanser, Glycolic Cleanser, Retinol Scrub, Cucumber Toner, Ageless Hydrating Serum, Vitamin C, Ageless Moisturizer, SPF



## **Acne Scarring:**

- Acne scarring, like any other scarring, are the result of a wound in the skin (dermis), which then heals, leaving too much collagen behind.
- Once you experience a wound, the collagen fibers don't lay down the same.
- Acne scars come in three varieties
  - $\hfill\square$  atrophic, which are mostly shallow
  - □ Boxcar-shaped
  - □ Ice pick-shaped, which are narrow and deeper.
- The best way to prevent any acne scars from forming is to prevent more acne in the first place.



## Pitted & Color Acne Scarring (Part 1)

This series takes 3-4 months, but you can get some amazing results without a lot of downtime if your client will commit to a weekly treatment. I realize that 3-4 months may sound like a long time, but alternatives are 3 monthly deep peels from a dermolotogist or a laser peel from a med spa. Wound healing with collagen always takes at least 3 months to see the full effects. This is effective on all Fitzpatricks!!!!

Here's the Skin Script recommendation; both professionally and at home:

**Homecare** (this is a must as we need to keep exfoliating at home and use lighteners to see the full results)

- Green Tea Cleanser to cleanse the face morning and night
- Glycolic Cleanser used 5 times per week
- 2% Retinol Scrub used 5 times per week in conjunction with the Glycolic Cleanser
- Cucumber Toner used every morning (rehydrate the skin)
- Glycolic Pads ued every evening on pigmentation
- Ageless Skin Hydrating Serum used morning and night (rehydrate the skin)
- Ageless Skin Moisturizer used morning and night
- SPF



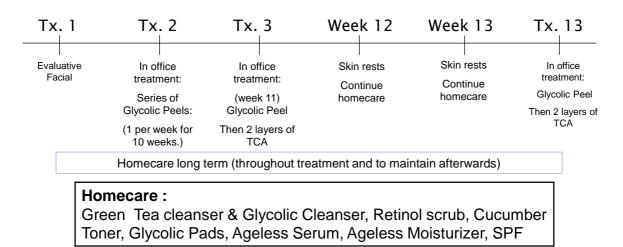
SKIN SCRIPT

## Pitted & Color Acne Scarring Part 2

#### Weekly Treatments

- Weeks 1-10: Perform a Glycolic Peel (do not modify your homecare during this peel series. I want to overexfoliate the skin, getting the dermis into trauma mode to produce collagen and plump up and even out the pitted acne scars.
- Week 11: Perform a Glycolic Peel, neutralize it, (I use the dermafile at this point) then apply 2 layers of the TCA. Wear the TCA at least 8 hours (or sleep in it). During this peel, you will need to modify your homecare to only a gentle cleanser, moisturizer and SPF, until the peeling process has completed. It is essential that you resume all Skin Script homecare, especially the Glycolic Pads after you are done flaking.
- Weeks 12–13: Let the skin rest and continue homecare.
- Week 14: Re-perform the procedure from week 11.
- You will have fabulous results with acne, pigment and texture. You have to be consistent about the homecare and the weekly peels.
- While this has worked for my clients, keep in mind that you will need to modify this protocol based on your clients' sensitivities/reactions to the peels.

## Treatment Protocol for Acne Scarring:



29

## Does your client have Acne?

- Glycolic Acid: AHA; breaks down desmosome
- Salicylic Acid: BHA; Clarifies skin; anti-bacterial
- Raspberry Fruit Extract: Anti-inflammatory, soothing.
- Tea Tree Oil: Antiseptic. Oil reducing.
- **Spin Trap (PNB)**: Entraps reactive oxygen species to restore proper chemical structure and spin to destructive molecules, limits lipid peroxidation and free radical damage.
- Totarol A revolutionary antioxidant that has tremendous effects on Acne and skin impurities, limits scarring from extractions, protects from free radical damage, maintains clear skin.

**But don't forget to establish hydration into the epidermis.** Remember: The desquamation process is reliant upon water to activate enzymes to promote cell turnover. Here's some ingredients to consider:

Hyaluronic Acid: binds water to skin cells Phospholipids and Sphingolipids: assist barrier function

#### Substances to avoid:

Steroids Testosterone UV Radiation Products that over dry the skin Products that over dry the skin Products that have high amounts of humectants in them. Heavy cosmetics that may have free fatty acids in them Amphetamines Barbiturates







Skin Script is dedicated to beautiful, healthy skin using fresh thinking to deliver the latest in vitalized, youthful looking skin.

Skin Script provides a clinical, professional skin care line containing retinols, glycolics, lactics, salicylics and natural lighteners / brighteners allowing you to customize a treatment regimen for your clients' skin conditions. Lisa: <u>lisa@skinscriptrx.com</u> Dave: <u>education@skinscriptrx.com</u> Candace: <u>marketing@skinscriptrx.com</u> Kristi: <u>sales@skinscriptrx.com</u> Megan: <u>support@skinscriptrx.com</u> Julie: <u>info@skinscriptrx.com</u>

480-543-1121

