

Problem / Oily Skin

Acne

Close to 85% of people will experience some form of acne in their lifetime. According to the Academy of Dermatology, acne is the most common skin disorder in the United States affecting 40-50 million Americans at one time.¹ When people think of acne, they think of teenagers, but acne can affect many people through adulthood as well. Some estimate as many as half of all adult women experience some form of acne due to an increase in androgen and a decrease of estrogen in peri-menopause.

Looking good and feeling good go hand in hand. This is why it can be so difficult for clients who suffer from acne. The affliction can have a devastating effect on self-esteem and confidence. Many acne sufferers withdraw socially, and even experience depression.

While an esthetician cannot treat, diagnose, cure or prevent any disease, the good news is that most oily, problem skin can be treated with outstanding results. And as you help your clients improve their skin, you'll also improve their confidence and self-esteem. Treating this skin type can be one of the most rewarding experiences for you as an esthetician

What is Acne?

Acne is an inflammatory lesion of the sebaceous

¹ American Academy of Dermatology, aad.org

glands. The first signs are usually during puberty, where there's an increase in the hormone androgen, which is especially active in stimulating the amount of oil produced by the sebaceous glands in the skin.

As the ducts of these glands become plugged with the waxy oil, comedones (black heads) and whiteheads (milia) form. They are frequently infected with bacteria, causing welts, deeper lumps and pimples (cysts or nodules).

Sebaceous glands are the glands situated at the root of the hair follicle in the dermis. They can be found all over the body except for the palms and soles. These glands secrete sebum or oil. When the oil is mixed with perspiration, the skin's surface becomes slightly acidic. This keeps some bacteria and fungi from embedding in the skin and at the same time helps to retain water in the tissue by slowing down evaporation from the skin. When the sebaceous glands are stimulated, a process known as retention, hyperkeratosis occurs. This may be triggered by the onset of puberty, hormonal fluctuation, pharmaceutical agents, and stress, as well as heat and humidity. In acne, the dead cells stick together, along with excess sebum and bacteria to form an impaction plug (shown in figure). This first stage-impacted follicle is often referred to as a micro-comedone. As the bacteria digest sebum, they produce fatty acid waste products that irritate

Figure 1- Clogged Pore

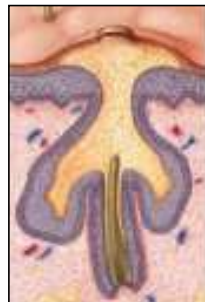
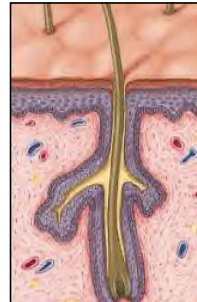


Figure 2- Normal pore



the lining of the follicle causing a proliferation of cells to accumulate in the impacted follicle. At this point, the disease may result in non-inflammatory lesions, and simply produce closed comedones. When they eventually turn into open comedones and expel their contents, inflamed lesions may also result, whereby the follicle wall ruptures forming a papule. White blood cells invade the area and inflammation ensues. If the break is close to the surface of the skin a pustule results. If it is deeper, a nodule forms. In some cases, a membrane entraps the infection and a cyst forms.

There are three factors that cause acne: Sebum, bacteria, and enclosure. When you encounter these factors together, it creates an environment for inflamed, irritated and congested skin.

The three factors:

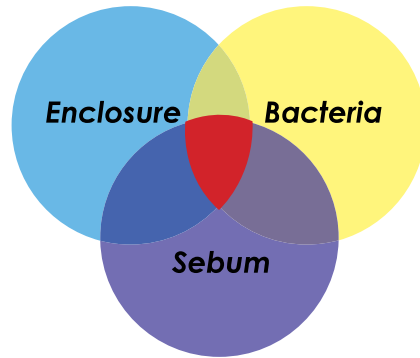
1. **Sebum** – Sebum is an oily substance that lubricates the surface of the skin, and helps to prevent surface dehydration. When there is an overabundance of sebum production, it fills the sebaceous duct. This extra sebum serves as nutrients for bacteria, which creates an environment for clogged pores (blackheads).
2. **Bacteria** – Propionibacterium acnes (P. Acnes) Growth of P. acnes in the hair follicle. P. Acnes is a bacterium that causes acne vulgaris, the most common type of acne.

3. **Enclosure** – a thickening of the wall of the sebaceous duct and the formation of a keratinaceous/horny plug prevents wicking of sebum creating a closed environment.

Enclosure + sebum = closed comedone

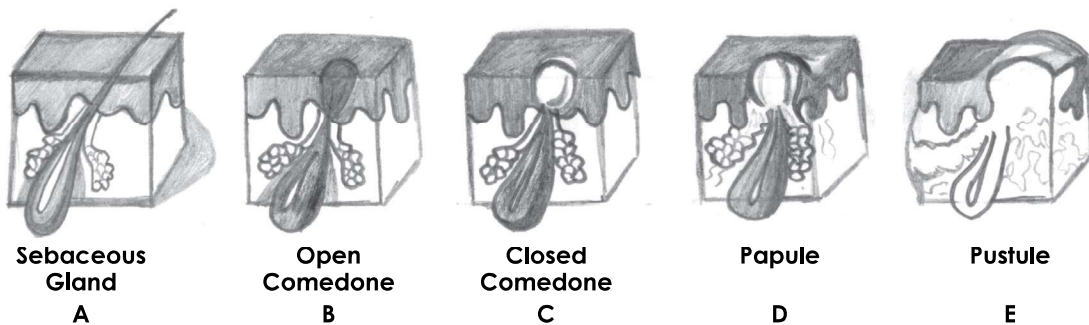
Bacteria + sebum = irritation

Enclosure + bacteria + sebum = full-blown acne



The sequence of event of the acne lesion

1. Keratinized plug blocks sebum from wicking out along the hair shaft
2. Stagnant sebum is broken down by bacterial enzymes into short chained fatty acid
3. Irritation of a papule is formed
4. Increased blood flow activates the immune system
5. White blood cells are rushed into to deal with the foreign matter
6. Pustules are formed



Types of acne lesions

Levels of Acne – Level A

Microcomedo: Comedone formed below the epidermis and can't be seen by the naked eye. Feels like small, hard bumps. As it enlarges, it looks like tiny white bumps just below the surface of the skin.

Closed Comedo (Whitehead): A firm white papule.

Open Comedo (Comedones): A hard plug composed of sebum and dead skin cells. This is the mildest form of acne.

Levels B and C

Papule: Inflamed lesions - Small, solid slightly raised areas of the skin less than half an inch in diameter. They may have varied appearance: rounded, smooth or rough, skin-colored or red, pink or brown.

Milia: Also known as epidermal cysts, these are small, firm white papules usually found in clusters on upper cheeks and around the eyes.

Pustule: A small, pus-containing skin blister often found at the opening of hair follicles. More visible inflammation than a papule

Levels D and E

Nodule: large painful solid lesion extending deep into the skin

Cysts: In some cases, a membrane entraps the infection and a cyst forms. Cysts are inflamed pus filled lesions.

What can be done?

Today, acne can be treated without the harshness and discomfort of traditional treatments that leave the skin red and irritated. First, to treat any form of acne, you have to deal with the three factors (Sebum, Bacteria, and Enclosure). This is done with a three- tier approach of professional esthetic treatments, home-care program, and diet with nutritional supplements.

Regardless of which form of acne is prevalent on the client, it is known that sebum production or oil is the

catalyst for the series of events that results in acne or skin blemishes. As skin care professionals, we know that excess sebum is often associated with enlarged pores, a tendency toward follicle congestion and an oily "T-zone". We can treat acne prone skin by controlling the excess sebum production, and maintaining proper moisture level.

Common Acne Types

Acne Conglobata: Severe hereditary acne that generally causes scarring on the face and back. It appears as irregularly joined nodules; at earlier stages hard, then with a soft fluid feel.

Acne Detergents: Acne caused by overuse of abrasive cleansers.

Acne Excoriee: A psychosomatic disease involving neurotic picking of the face.



(Photo provided by Karen Burke., MD., Ph.D.) Acne Excoriee

Acne Mallorca: Caused by excessive sun exposure. It's often seen in people who work outdoors.

Acne Mechanica: Acne caused by mechanical irritation (such as under the chinstraps in football players).

Acne Medicamentosa: Acne caused by medications.

Chloracne Acne: Caused by constant exposure to certain industrial chemicals, such as aromatic halogenated compounds, and the hydrocarbons found in motor oil.

Steroid Acne: An inflammation of hair follicles caused by internal steroids or from topical corticosteroids on the face.

Acne Cosmetica: A condition caused by comedogenic ingredients found in hair styling products, conditioners, certain sunscreens and makeup. Acne cosmetica lesions are of the same shape and size, and can be avoided by switching to non-comedogenic products.



Acne cosmetica

Cystic Acne: A severe type of acne condition when the sebum together with dead cells and bacterial products ruptures through the follicle wall, causing an inflammatory reaction that may end in scarring. It appears as a large rubbery nodule, often skin-colored and surrounded by red inflamed tissue, 5-20mm in size.



Cystic acne

Acne Vulgaris: Most common form of acne, most common in teenagers. It is a direct result of an increase in the male hormone Androgen. Normally develops at puberty and can be triggered at any age. Characterized by a variety of lesions, being visible at any time.



Acne Vulgaris

(Photo provided by Karen Burke., MD., PHD.)

Deep Pore Cleansing

Desincrustation: Desincrustation is the process of softening the keratinaceous horny plug and allows extractions to proceed easily with minimal trauma to the surrounding tissue. Historically this has been performed with electrical equipment, this can be uncomfortable for the client and many cannot use it because of the contraindications. Today, we have created a gentle Desincrustation mask that anybody can use and it will make the extraction process very easy.

Lancets: Estheticians can remove comedones (closed and open), milia, papules and pustules, with the use of lancets, (check with your local state board if it is permissible). However, cysts and nodules must be treated by dermatologists. As an esthetician you can still administer facial treatments that will help lessen the appearance of oily, problem skin but you won't be able to remove those lesions.

Comedone extractions:

Wearing vinyl gloves, wrap your index fingers with cotton that's been applied with astringent. Use the sides of the fingertips to exert firm pressure of the skin surrounding the comedone and lift the blackhead gently. Remember not to use your nails for pressure this will dig the impaction deeper into the skin. If it doesn't remove immediately, with slight pressure from side to side, use alternating angles to gently lift the comedone.

Another gentle and effective way to remove a comedone is with sterile cotton swabs. Hold the swabs with your index finger and thumb and gently press down on both sides of the comedone. If the contents do not expel right away, move the swabs gently from side to side and then it will lift up. Do not apply too much pressure as it could bruise the skin. If the contents are not expelling, leave it for the next treatment and move to another area. Remember the comedones did not occur in one day and many times it will take more than one treatment to clear them all up.

Milia extractions:

Milia can only be removed with the use of a lancet. You must once again check with your local state board to see if it is permissible. If it is permissible to use a lancet, to extract a milia hold the lancet parallel to the skin and gently pierce the skin in a horizontal motion at the follicle opening. Remember if you prick the skin with the lancet in a downward motion you could scar the skin.

After piercing the skin horizontally wrap the index fingers with cotton or sterile cotton swabs (as explained above), moving your fingers or the cotton swabs gently pressing down on both sides of the milia.

A good way to practice extractions using a lancet is to blow up a balloon and pierce it gently. If the balloon pops you are using too much pressure. Practice until you do not pop the balloon, then you will be ready to work with a lancet. After using the lancet, it must be disposed of in a sharp box. **DO NOT REUSE LANCETS!**

The extraction process should not take more than 10-15 minutes. Again, your clients did not get acne overnight and we cannot get rid of it in one session. After extractions, the skin should be treated with an antibacterial astringent and mask. This is critical as they help prevent any secondary infections. A second mask that is soothing is also recommended, as it is effective in removing any redness that may be left over from the extractions.

A client should never leave the salon with red, irritated skin after an acne treatment. Treatments like the Hydra Medic® Facial Treatment with Desincrustation Mask (protocol in the facial treatment section) are gentle yet highly effective because of the ingredients and the use of the Hydra Medic® Desincrustation Mask, a first in the skin care industry.

Esthetics Tools in Treating Oily, Problem Skin

Galvanic Machine (see page 53)

The galvanic machine can be used to assist in the removal of blackheads. Use with Repêchage® Desincrustation Solution

High Frequency

High Frequency is an excellent and versatile tool for the esthetician. This electrical unit contains an electrode that uses UVC germicidal rays.

High Frequency:

- Has anti bacterial properties
- Decreases inflammation
- Allows for faster healing time for lesions
- Prevents secondary infections

Contraindications when working with high frequency machine:

- Do not use on pregnant clients
- Do not use on people with high blood pressure or heart condition
- Epileptics
- Asthmatics
- Clients that have braces, metal implants or heavy dental work

High Frequency can be used over a product such as the Hydra Medic® Mattifying Moisturizer. Place your index finger on the electrode and when it makes contact with the face lift your index finger off of the electrode and begin in a circular motion to move the electrode over and around the face where extractions have been made. You may use a sparking method over areas where there were pustules. This is a lifting of the electrode on and off the areas quickly creating a sparking effect. Once done, place the index finger back onto the

electrode and then lift it off the skin. High frequency should be used for 3-5 minutes. To clean your electrode, wash with soap and water, and then wipe it down with alcohol. Sterilize each electrode for at least 20 minutes at the end of each day.

Educating your Client

Education and knowledge is the key in treating acne. Educate you client on the importance of in-salon treatments and following a home-care program especially designed for them.

As you know picking and squeezing pustules will only make acne worse. Picking can spread acne-causing bacteria and squeezing can spread infected material deeper into the skin causing more inflammation and even scarring.

Another misconception is that acne can simply be washed away. But over-washing will further irritate the skin. Educate your clients on the myths of acne, such as acne is caused by chocolate. There is no evidence to support that claim. Maintaining a healthy lifestyle, home care program, nutritional supplements and professional anti-acne treatments will lead to a healthier more radiant skin at any age.



Why the Hydra Medic® Facial for Oily, Problem Skin Treatment Works

Key Ingredients

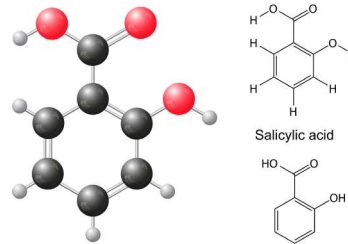
The Hydra Medic® Facial treatment contains new, significant advances in skin care, all based on natural processes. The word Repêchage® means, "second chance" or "rescue" and that is exactly what this facial delivers: Our exclusive combination of natural herbal and marine ingredients helps to cleanse while helping to control the appearance of oil from overly active sebaceous glands, simultaneously helping to hydrate, tone and firm the appearance of the skin, protecting it against potential scarring.

Zinc Oxide

Zinc is essential in maintaining a healthy immune system. The best nutritional sources for Zinc are oysters, red meat, nuts and seafood.

Salicylic Acid

This naturally derived Beta Hydroxy Acid gently helps to exfoliate and improve the appearance of the skin.



Lithothamnium Calcareum Powder

The ingredient is made by combining zinc oxide with ferritic oxide. Calamine is used in clear skin care products and cosmetics to help absorb oil and moisture.

Sulfur



Elemental sulfur is a proven mild keratolytic agent. It is used to unclog pores in masks and treatments. Traditionally used for problem skins, sulfur works synergistically with other micro-exfoliant ingredients and is particularly suitable for skins prone to breakout and congestion.



Ichthammol

Ichthammol is a mineral derived mixture of theophen with free sulfur. It's mined from the Tyrolean Alps in Central Europe. Ichthammol is used to absorb excess sebum and helps cleanse the skin. It is especially useful in masks that are to be applied after extractions.



Synergistic Tea Blend

This is a blend of white, yellow, green and red teas. These teas are used to help calm and soothe the appearance of the skin, reduce dryness and appearance of scaliness as well as reduce the appearance of any redness that may be present.



Laminaria Digitata

Laminaria digitata is brown seaweed, rich in polysaccharides and vitamins.



Ascophyllum Nodosum

Brown seaweed found in the upper intertidal and shallow subtidal marine environments in the North Atlantic Ocean.

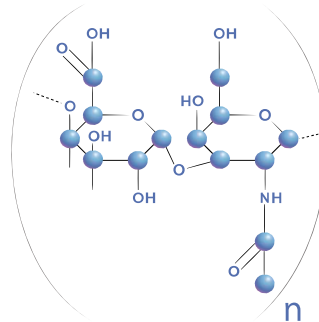


Chamomile Extract

It is one of the most widely used botanicals and has carminative and emollient properties. It contains azulene which helps to reduce the appearance of puffiness and cleanse pores of impurities. Chamomile oil is extensively used with skin problems such as rashes, acne, eczema, psoriasis, hypersensitive skin and allergic conditions.

Hyaluronic Acid (Sodium Hyaluronate)

Moisturizes superficial fissures due to the fragility of mature skin. Hyaluronic acids are naturally present in the skin. It can hold 100X its weight in water. Repêchage® uses a non-animal source of hyaluronic acid delivered from sugar beets.



Willow Bark Extract

Extracted from willow, this helps with mild exfoliation of dead skin cells to reveal a more luminous complexion.



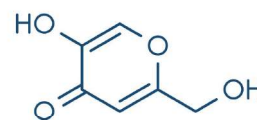
Aloe

This popular extract contains beneficial substances, including minerals, amino acids, vitamins, and enzymes.



Citrus Aurantium Dulcis (Orange) Water

This 100% fruit water helps to make skin feel more soothed.



Kojic Acid

Molecule derived from a variety of fungi. Discovered in 1907 by Saito. It acts as a chelator of divalent ions, as a free radical trapper, and as a tyrosinase inhibitor. Common ingredient in depigmentation preparation. It acts as an iron chelator providing anti-wrinkle properties.

Hydra Medic® products are not intended to treat, diagnose, cure or prevent any disease.