Chemical peels are one of the most popular non-invasive cosmetic procedures performed to rejuvenate the appearance of the skin. Over time, factors such as sun damage, heredity, diet, and repetitive muscle movement contribute to the formation of lines and wrinkles in the face. Additionally, the development of pigmentation irregularities or acne scars can cause skin to lose its smooth, youthful appearance. Often performed on the face, neck, and hands, various types of chemical peels can reduce the appearance of facial wrinkles, scars, and uneven pigmentation, as well as treat pre-cancerous skin lesions.
Deep Peel Introduction
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Doctor's Personal Note: A Message From Your Doctor
Thank you for visiting our website and viewing our 3D Animation Library. These animations should assist you in better understanding your condition or procedure. We look forward to answering any additional questions you may have at our next appointment.
Deep Peels
Deep peels generally produce the most dramatic results of any type of chemical peel. Deep peels are usually performed using phenol, which is also known as carbolic acid. Phenol is the strongest acid used to perform a chemical peel. While phenol can be used in its pure form, it may be mixed with water, soap, olive oil, or croton oil to increase the effectiveness of treatment.

Although deep peels produce the most dramatic results, the associated risks are generally higher. For example, if not used carefully, phenol can be toxic to the body. There is also an increased risk of scarring as well as sensitivity to the sun. Deep peels permanently lighten the skin; therefore they are not appropriate for individuals with dark complexions. As the strongest chemical peel available, deep peels are an effective method for treating deep, coarse lines, pigmentation abnormalities, deep acne scars, extensive sun damage, blotchiness of the skin, and precancerous skin lesions.

Overview of the Skin
The skin is composed of two layers known as the epidermis and dermis. The epidermis, or outer layer of the skin, acts as the skin’s primary defense against the environment. As a result, these layers sustain the most damage. The dermis, or innermost layer, is responsible for providing structure and support to the skin.
What Causes Skin Damage?
The dermis is comprised primarily of connective tissue, which is made mostly of collagen and elastin fibers. These fibers form a network that provides the skin with structure, support, and elasticity. Over time, the aging process and sun damage cause a decrease in the amount of collagen and elastin fibers. As this network of fibers breaks down, the skin loses its elasticity and becomes more lax. Together, aging, sun damage, and additional factors contribute to wrinkle formation and other changes in appearance.

How Do Deep Peels Work?
During a deep peel, a chemical solution is applied to the face. The solution causes trauma, or injury, to the skin's layers. Deep peels penetrate the farthest distance into the skin and therefore cause the most injury. This injury may extend into the papillary or reticular dermis, which is why this type of peel causes the most dramatic results. Similar to exfoliating your skin, the damaged layers of skin will peel away. As part of the healing process, increased cell growth as well as collagen production and reorganization in the dermis will produce new, healthier skin layers, which give the face a more youthful, rejuvenated appearance.
**Procedure Preparation**
Deep peels may last between one and two hours. Prior to the start of your procedure, the treatment areas will be cleansed, usually using an alcohol based cleaner. As phenol is associated with a more intense burning sensation than other types of chemical peels, a local anesthetic with sedation or general anesthesia will be administered.

**Deep Peel Procedure**
A sponge or a brush will be used to apply the chemical solution to individual areas over the entire face. Unlike other types of chemical peels, deep peels damage both the epidermis and the dermis. The solution used during a deep peel may penetrate as far as the reticular, or lower dermis, which is why the effects of treatment are so significant.
Effects of a Deep Peel Procedure
Much like a medium peel, phenol application causes what is known as frosting on the skin, in which the treatment areas turn white. The degree of frosting will be used to assess the depth of treatment. Once the desired level of treatment has been achieved, the chemical solution will be removed or neutralized with a different substance. The damaged layers of skin will peel away over time, while the healing process triggers cell growth which generates new skin layers. In addition, deep within the dermis, the healing process also stimulates collagen production and reorganization, which improves the structure of the skin's framework. As you heal, the new skin is revealed, giving the face a smoother, revitalized appearance.

Deep Peel Recovery
Immediately following your procedure, you may continue to experience some frosting, which will last approximately one hour. Petroleum jelly or adhesive bandages may be applied to your face to protect your skin as it heals. As the recovery process is more extensive than other types of chemical peels, you may need to take approximately one week off of work to recuperate. You will likely experience some pain and swelling in the days following your procedure, which can be alleviated with pain medication. You will also experience some redness, oozing, and crusting of your skin. Most of these symptoms will dissipate in approximately seven to ten days, while the redness will fade slowly over a few months. Your skin will stiffen and start to peel within days of the procedure, and new, healthy skin will appear in approximately one to two weeks.
Deep Peel Results

As you know, the effects of a deep peel are much more significant compared to other types of chemical peels. While the results from a superficial or medium peel must be maintained with repeat treatments, the results from a deep peel are permanent, often lasting decades. It is important to realize that your skin will always appear pale in comparison to untreated skin. In addition, your skin may be more sensitive to sunlight following treatment and will always require protection with SPF 15 after your procedure. Despite the increased risks, when used carefully, deep peels are an effective method of drastically improving the tone and texture of your skin, which will restore a more youthful appearance.