BlueCross BlueShield of Alabama

See National Coverage Determination (NCD) for Treatment of ACTINIC KERATOSIS (250.4) for coverage criteria of actinic keratosis.

Name of Blue Advantage Policy:

Chemical Peels

Policy #: 052
Latest Review Date: December 2021
Category: Surgical

BACKGROUND:

Blue Advantage *medical policy does not conflict with Local Coverage Determinations (LCDs), Local Medical Review Policies (LMRPs) or National Coverage Determinations (NCDs) or with coverage provisions in Medicare manuals, instructions or operational policy letters. In order to be covered by Blue Advantage the service shall be reasonable and necessary under Title XVIII of the Social Security Act, Section 1862(a)(1)(A). The service is considered reasonable and necessary if it is determined that the service is:*

1. *Safe and effective;*
2. *Not experimental or investigational*;*
3. *Appropriate, including duration and frequency that is considered appropriate for the service, in terms of whether it is:*
   - *Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member;*
   - *Furnished in a setting appropriate to the patient's medical needs and condition;*
   - *Ordered and furnished by qualified personnel;*
   - *One that meets, but does not exceed, the patient's medical need; and*
   - *At least as beneficial as an existing and available medically appropriate alternative.*

In accordance with Title XVIII of the Social Security Act, Section 1862 (a)(10) cosmetic surgery or expenses incurred in connection with such surgery is not covered except as required for the prompt repair of accidental injury or for improvement of the functioning of a malformed body member.

Routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 which meet the requirements of the Clinical Trials NCD are considered reasonable and necessary by Medicare. Providers should bill* ***Original Medicare* *for covered services that are related to* ***clinical trials*** *that meet Medicare requirements (Refer to Medicare National Coverage Determinations Manual, Chapter 1, Section 310 and Medicare Claims Processing Manual Chapter 32, Sections 69.0-69.11).*

POLICY:

Blue Advantage will treat **dermal chemical peels** as a **covered benefit** when used to treat extensive actinic keratosis (greater than 10 lesions) when photodynamic therapy (PDT) with topical 5-aminolevulinic acid is not a treatment option due to the presence of hyperkeratotic lesions and the patient is unable to tolerate treatment with topical 5-FU.

Blue Advantage will treat **epidermal chemical peels** as a **covered benefit** when used to treat **active comedonal acne that has failed a trial of topical and/or oral antibiotic acne therapy.** In this setting, epidermal chemical peels with 50-70% alpha-hydroxy acids are used as a comedolytic therapy.

- **Up to 8 epidermal (superficial) peels may be** considered as a **covered benefit** for treatment of comedonal acne.
- Pre-procedural photos must document the presence of active comedonal acne and be submitted for review along with the clinical documentation. Each photo should be labeled with the patient name, date and procedure to be performed.
- Photos should include the following:
    - Full-face front
    - Right and left oblique
    - Close-up of regional area
- The active ingredient and strength should be documented for each treatment session as well as any changes noted from previous treatment.

Blue Advantage will treat **epidermal chemical peels with 50 - 70% alpha hydroxy acids as a first-line treatment of active acne** as a **non-covered benefit.**

Blue Advantage will treat **subsequent epidermal (superficial) peels (i.e., >8) for treatment of active comedonal acne** as a **covered benefit with submission of supportive clinical documentation, including pre- and post-procedural photos of previous treatments showing improvement of condition.**

- Each photo should be labeled with the patient name, date and procedure to be performed.
- Photos should include the following:
    - Full-face front
    - Right and left oblique
    - Close-up of regional area
- The active ingredient and strength should be documented for each treatment session as well as any changes noted from previous treatment.

Blue Advantage will treat **chemical peels** performed for photoaged skin, wrinkles or acne scarring as a **non-covered benefit** and as **cosmetic**.

Blue Advantage does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Advantage administers benefits based on the members' contract and medical policies. Physicians

should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.

DESCRIPTION OF PROCEDURE OR SERVICE:

A chemical peel refers to a controlled removal of varying layers of the epidermis and superficial dermis with the use of an agent such as phenol or trichloroacetic acid (TCA). The most common indication for chemical peeling is as a treatment of photoaged skin, i.e. correction of pigmentation abnormalities, solar elastosis, and wrinkles. However, chemical peeling has also been used as a treatment for multiple actinic keratosis, active acne, and acne scarring.

Chemical Peels

Chemical peels involve a controlled partial-thickness burn of the epidermis and the outer dermis. When skin is regenerated, a 2-3mm band of dense, compact collagen is formed between the epidermis and the damaged layers of the dermis, resulting in the ablation of fine wrinkles and a reduction in pigmentation. These changes can be long term, lasting up to 15 to 20 years and may be permanent in some patients. Potential local complications include scarring, infection, hypopigmentation, activation of herpes simplex and toxic shock syndrome.

Types of Peels

Chemical peels are often categorized according to the depth of the peel: categories include superficial medium-depth and deep chemical peels. The precise depth of the peel depends on the concentration of the agent used, duration of the application and the number of applications. Possible indications for each type of peel and common chemicals used, as described in 2005 by Cummings et al, is as follows.

Superficial Peels

Superficial peels (epidermal peels) affect the epidermis and the interface of the dermis-epidermis. This depth is considered appropriate for treating mild photoaging, melasma, comedonal acne and post-inflammatory erythema. Common chemical agents used for superficial peels include low concentrations of glycolic acid, 10-20% trichloroacetic acid (TCA), Jessner's solution (a mixture of resorcinol, salicylic acid, lactic acid and ethanol), tretinoin, 5-fluorouracil (5-FU) and salicylic acid. As part of the treatment process, superficial peels generally cause mild erythema and desquamation, and the healing time ranges from 1 to 4 days, depending on the strength of the chemical agent. With superficial peels, patients often undergo multiple sessions; generally a total of six to eight peels performed weekly or every other week.

Medium-Depth Peels

Medium-depth peels (dermal peels) extend through the epidermis to the papillary dermis. These are used for moderate photoaging, actinic keratoses and mild acne scarring. In the past, 50% TCA was a common chemical agent for medium-depth peels but its use has decreased due to a high rate of complications such as pigmentary changes and scarring. Currently, the most frequently used agent is a combination of 35% TCA with Jessner's solution or 70% glycolic acid. Phenol 88% alone is also used for medium-depth peels. The healing process involves mild

to moderate edema, followed by the appearance of new, erythematous epithelium. Patients are advised to wait at least 3 months before resuming skin care services, such as superficial chemical peels, and repeat medium-depth chemical peels should not be performed for at least 1 year.

Deep Peels
Deep chemical peels (another type of dermal peel) penetrate the mid-reticular dermis and are used for patients with severe photodamage. The most common chemical agent used is Baker's solution (which consists of 88% phenol, 8 drops of Septisol, 3 drops of croton oil, and 2 mL of distilled water). The same depth can be achieved using 50% or greater TCA peels; however the latter has a higher risk of scarring and pigmentation problems. Phenol is cardiotoxic and patients must be screened for cardiac arrhythmias or medical that are could potentially precipitate an arrhythmia. Phenol can also have renal and hepatic toxicities.

The likelihood and potential severity of adverse effects increases as the strength of the chemicals and depth of peels increases. With deep chemical peels, there is the potential for long-term pigmentary disturbances (i.e., areas of hypopigmentation) and selection of patients willing to always wear makeup is advised. Moreover, chemical peels reduce melanin protection so patients must use protective sunscreen for 9 to 12 months after a medium- to deep-facial peel.

Applications
Chemical peels are a potential treatment option for actinic keratoses and moderate-to-severe acne. Actinic keratoses are common skin lesions associated with extended exposure to the sun, with an estimated prevalence in the United States of 11% to 26%. They are generally considered to be a precursor of squamous cell carcinoma (SCC). The risk of progression to invasive SCC is unclear, but estimates vary from 0.1% to 20%.3 For patients with multiple actinic keratoses, risk of developing invasive squamous cell carcinoma is estimated as being between 0.15% and 80%. Treatment options include watchful waiting, medication treatment, cryosurgery, and surgical resection.

Acne vulgaris is the most common skin condition among adolescents, affecting an estimated 80% of 13- to 18-year olds. Acne, particularly moderate-to-severe manifestations, can cause psychologic distress including low self-esteem, depression, and anxiety. There are a variety of oral and topical treatments for acne.

KEY POINTS:
This policy has been updated regularly with searches of the MEDLINE database. Most recently, the literature was reviewed through September 20, 2021.

Summary of Evidence
For individuals who have actinic keratoses who receive chemical peels, the evidence consists of a systematic review involving 8 studies - 4 randomized controlled trials (RCTs), 2 non-randomized controlled trials, and 2 single-arm studies. Relevant outcomes are symptoms, morbid events, quality of life, and treatment-related morbidity. Data analysis and interpretation of results were challenged by the high risk of bias of the primary studies, their imprecision, the variability

of their peeling application protocols, and their focus on short-term clearance rates. Additional controlled studies, preferably randomized, are needed. The evidence is insufficient to determine the effects of the technology on health outcome.

For individuals who have moderate-to-severe active acne who receive epidermal chemical peels, the evidence includes an RCT. Relevant outcomes are symptoms, morbid events, quality of life, and treatment-related morbidity. Results from the single, small, randomized, placebo-controlled, split-faced trial found greater efficacy with active treatment than with placebo. However, no studies were identified comparing chemical peel agents with conventional acne treatment. The evidence is insufficient to determine the effects of the technology on health outcome.

Practice Guidelines and Position Statements

British Association of Dermatologists

In 2007, British Association of Dermatologists published a guideline on the management of actinic keratoses. Chemical peels were given a 'C, III" rating, meaning that there is "poor evidence to support the use of the procedure" and the evidence consists of "opinions of respected authorities based on clinical experience, descriptive studies or reports of expert committees."

American Academy of Dermatology

In 2007, American Academy of Dermatology published a guideline on management of acne vulgaris which included the statement, "There is limited evidence regarding the benefit of physical modalities including glycolic acid peels and salicylic acid peels."

American Society for Dermatologic Surgery

The American Society for Dermatologic Surgery published recommendations in 2017 on the use of several skin treatments following a course of isotretinoin, a treatment for severe cystic acne. Previously, a number of cosmetic skin treatments, including chemical peels, were discouraged for 6 months after the use of isotretinoin. These 2017 guidelines evaluated various treatments in the context of scarring and found that superficial chemical peels were safe as a treatment either concurrent with isotretinoin or within 6 months of its discontinuation. The lack of data on medium or deep chemical peels did not permit the Society to make a recommendation on those treatments.

U.S. Preventive Services Task Force Recommendations

Not Applicable.

KEY WORDS:

Chemical peel, skin peel, actinic keratoses, active acne, premalignant skin lesions, comedonal acne, epidermal peel, superficial peel, alpha hydroxy acids, comedolytic therapy

APPROVED BY GOVERNING BODIES:
FDA clearance or approval may not be relevant for the chemical agents used in peeling because they are prepared in-office, may have pre-dated FDA approval and/or may be considered cosmetic ingredients.

BENEFIT APPLICATION:
Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

CURRENT CODING:
CPT code:

15788	Chemical peel, facial, epidermal
15789	Chemical peel, facial, dermal
15792	Chemical peel, nonfacial, epidermal
15793	Chemical peel, nonfacial, dermal

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POLICY HISTORY:

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Medical Policy Group, July 2006
Medical Policy Group, July 2008
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