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: January 2024
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:

For chemical peels and other treatments for actinic keratosis, refer to NCD 250.4- Treatment of Actinic Keratosis.

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 individual 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 individual 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 is a controlled removal of various layers of the skin with the use of a chemical agent. The most common use of chemical peeling is the treatment of photoaged skin. Chemical peeling has also been used for other conditions, including actinic keratoses, active acne, and acne scarring.

Chemical Peels

Chemical peels involve a controlled partial-thickness removal of the epidermis and the outer dermis. When skin is regenerated, a 2- to 3-mm 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 15 to 20 years and may be permanent in some individuals. Potential local complications include scarring, infection, hypopigmentation, hyperpigmentation, activation of herpes simplex, and toxic shock syndrome.

Types of Peels

Chemical peels are often categorized by 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, the duration of the application, and the number of applications. Possible indications for each type of peel and common chemicals used, as described by Cummings et al (2005) and others, 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 postinflammatory erythema. Common chemical agents used for superficial peels include low concentrations of glycolic acid, 10% to 20% trichloroacetic acid (TCA), Jessner solution (a mixture of resorcinol, salicylic acid, lactic acid, and ethanol), tretinoin, and salicylic acid. As part of the treatment process, superficial peels generally cause mild erythema and desquamation, and 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, 6 to 8 peels performed weekly or biweekly.

Medium-Depth Peels

Medium-depth peels (dermal peels) extend into the epidermis to the papillary dermis. They are used for moderate photoaging, actinic keratoses, pigmentary dyschromias, 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 high rates of complications (e.g., pigmentary changes, scarring). Currently, the most frequently used agent is a combination of 35% TCA with Jessner 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.

Individuals are advised to wait at least 3 months before resuming skincare services (e.g., 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 have been used for patients with severe photodamage, premalignant skin neoplasms, acne scars, and dyschromias. The most common chemical agent used is Baker solution (which consists of 3 mL of 88% phenol, 8 drops of hexachlorophene [Septisol], 3 drops of croton oil, 2 mL of distilled water). The same depth can be achieved using 50% or greater TCA peel; however, the latter has a higher risk of scarring and pigmentation problems. Phenol is cardiotoxic, and patients must be screened for cardiac arrhythmias or medications that could potentially precipitate an arrhythmia. Phenol can also have renal and hepatic toxicities.

The likelihood and potential severity of adverse events increase as the strength of the chemicals and the 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 individuals 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 U.S. of 11% to 26%. These lesions are generally considered to be a precursor of squamous cell carcinoma. The risk of progression to invasive squamous cell carcinoma is unclear, but estimates vary from 0.1% to 20%. For patients with multiple actinic keratoses, the 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 teenagers aged 13 to 18 years old. 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:
The literature search for this policy was performed through November 3, 2023.

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 that the technology results in an improvement in the net 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 that the technology results in an improvement in the net health outcome.

Practice Guidelines and Position Statements

American Academy of Dermatology

In 2016, the American Academy of Dermatology (AAD) published guidelines on the management of acne vulgaris, which give a B recommendation based on level II and III evidence for the use of chemical peels for acne, with the following statement on chemical peels:

"Studies exist suggesting that chemical peels may improve acne. However, large, multicenter, double-blinded control trials comparing peels to placebo and comparing different peels are lacking. Glycolic acid and salicylic acid chemical peels may be helpful for noninflammatory (comedonal) lesions. However, multiple treatments are needed and the results are not long-lasting. In the opinion of the work group, chemical peels may result in mild improvement in comedonal acne."

In 2021, the AAD published guidelines on the management of actinic keratosis, which gave a conditional recommendation based on moderate quality of evidence for the use of specific chemical peels for actinic keratosis. The recommendation stated: "For patients with AKs [actinic keratosis], we conditionally recommend treatment with ALA [aminolevulinic acid]-red light PDT [photodynamic therapy] over trichloroacetic acid peel."

American Society for Dermatologic Surgery

In 2017, The American Society for Dermatologic Surgery published recommendations on the use of several skin treatments following a course of isotretinoin, a treatment for severe cystic acne. Previously, several 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 the member's specific benefits. Group-specific policy will supersede this policy when applicable.

CURRENT CODING:
CPT code:

15788	Chemical peel, facial, epidermal
15789	; facial, dermal
15792	; nonfacial, epidermal
15793	; nonfacial, dermal
17360	Chemical exfoliation for acne (e.g., acne paste, acid)

REFERENCES:

1. Alfaro OL, Alcala PD, Navarrete FG, et al. Effectiveness of Jessner's solution plus 35% trichloroacetic acid versus 5% 5-fluorouracil on multiple facial actinic keratosis. Dermatol Rev Mex. 2012;56:38-46.
2. Costa C, Scalvenzi M, Ayala F, et al. How to treat actinic keratosis? An update. J Dermatol Case Rep. Jun 30 2015;9(2):29-35.
3. Cummings CW, Haughey BH, Thomas JR, et al. Otolaryngology: Head and Neck Surgery, 4th edition, 2005. Mosby, Chapter 29, pp. 700-711.
4. Di Nuzzo S, Cortelazzi C, Boccaletti V, et al. Comparative study of trichloroacetic acid vs. photodynamic therapy with topical 5-aminolevulinic acid for actinic keratosis of the scalp. Photodermatol Photoimmunol Photomed. Sep 2015; 31(5): 233-238.

5. Eisen DB, Asgari MM, Bennett DD, et al. Guidelines of care for the management of actinic keratosis. J Am Acad Dermatol. Oct 2021; 85(4): e209-e233.
6. Habif TP. Clinical Dermatology 5th Edition. Philadelphia, PA: Mosby/Elsevier; 2010.
7. Holzer G, Pinkowicz A, Radakovic S, et al. Randomized controlled trial comparing 35% trichloroacetic acid peel and 5-aminolaevulinic acid photodynamic therapy for treating multiple actinic keratosis. Br J Dermatol. May 2017; 176(5): 1155-1161.
8. IOM (Institute of Medicine). 2011. Clinical Practice Guidelines We Can Trust. Washington, DC: The National Academies Press.
9. Kaminaka C, Uede M, Matsunaka H et al. Clinical evaluation of glycolic acid chemical peeling in patients with acne vulgaris: a randomized, double-blind, placebo-controlled, split-face comparative study. Dermatol Surg 2014; 40(3):314-322.
10. Kaminaka C, Yamamoto Y, Yonei N, et al. Phenol peels as a novel therapeutic approach for actinic keratosis and Bowen disease: Prospective pilot trial with assessment of clinical, histologic and immunohistochemical correlations. J Am Acad Dermatol, April 2009; 60(4): 615-625.
11. Lawrence N, Cox SE, Cockerell CJ, et al. A comparison of the efficacy and safety of Jessner's solution and 35% trichloroacetic acid vs 5% fluorouracil in the treatment of widespread facial actinic keratoses. Arch Dermatol. Feb 1995; 131(2): 176-181.
12. Marrero GM, Katz BE. The new fluor-hydroxy pulse peel. A combination of 5-fluorouracil and glycolic acid. Dermatol Surg. Sep 1998; 24(9): 973-978.
13. Padilla RS, Sebastian S, Jiang Z, et al. Gene expression patterns of normal human skin, actinic keratosis, and squamous cell carcinoma: a spectrum of disease progression. Arch Dermatol. Mar 2010;146(3):288-293.
14. Purdy S, de Berker D. Acne vulgaris. BMJ Clin Evid. Jan 05 2011;2011.
15. Sandoval Osses M, Garcia-Huidobro Ramirez I, Molgo Novell M. Safety and effectiveness of the association of 5-fluorouracil and glycolic acid peeling for the treatment of multiple actinic keratoses. Piel. 2010;25: 4-8.
16. Steeb T, Koch EAT, Wessely A, et al. Chemical peelings for the treatment of actinic keratosis: a systematic review and meta-analysis. J Eur Acad Dermatol Venereol. Mar 2021; 35(3): 641-649.
17. Sumita JM, Miot HA, Soares JLM, et al. Tretinoin (0.05% cream vs. 5% peel) for photoaging and field cancerization of the forearms: randomized, evaluator-blinded, clinical trial. J Eur Acad Dermatol Venereol. Oct 2018; 32(10): 1819-1826.
18. Waldman, et al. ASDS Guidelines Task Force: Consensus Recommendations Regarding the Safety of Lasers, Dermabrasion, Chemical Peels, Energy Devices, and Skin Surgery During and After isotretinoin Use. Dermatol Surg. Oct 2017;43(10):1249-1262.
19. Zaenglein AL, Pathy AL, Schlosser BJ, et al. Guidelines of care for the management of acne vulgaris. J Am Acad Dermatol. May 2016;74(5):945-973 e933.

POLICY HISTORY:

Adopted for Blue Advantage, March 2005
Available for comment May 1-June 14, 2005
Medical Policy Group, July 2006
Medical Policy Group, July 2008
Medical Policy Group, July 2010
Available for comment September 2 through October 17, 2011
Medical Policy Group, July 2012
Medical Policy Group, July 2013
Medical Policy Group, July 2014
Medical Policy Group, July 2015
Medical Policy Group, July 2016
Available for comment August 1 through September 14, 2016
Medical Policy Group, December 2016
Medical Policy Group, December 2017
Medical Policy Group, December 2019
Medical Policy Group, January 2021
Medical Policy Group, December 2021
Medical Policy Group, December 2022: 2022 annual update. Added CPT code 17360 to Current Coding section effective 1/1/23.
UM Committee, December 2023: Policy approved by UM Committee for use for Blue Advantage business.
Medical Policy Group, January 2024
UM Committee, January 2024: Annual review of policy approved by UM Committee for use for Blue Advantage business.
