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Laser Treatment of Port Wine Stains Corporate Medical Policy

File Name: Laser Treatment of Port Wine Stains

File Code: 7.01.VT40

Origination: 08/2016

Last Review: 02/2021

Next Review: 02/20222

Effective Date: 04/01/2021

Description/Summary

Port wine stains are common vascular malformations that start as pink macules and, if untreated, tend to become darker and thicker over time. They usually occur on the face and neck but can be located elsewhere on the body. Treatment with lasers (including pulsed dye lasers [PDL], Alexandrite, nd:YAG lasers, and intense pulsed light [IPL]) is proposed. Treatment is not innocuous and cutaneous and ocular damage can occur if clinicians are not vigilant.

Policy

Coding Information

Click the links below for attachments, coding tables & instructions.

[Attachment I- Code Table & Instructions](#)

When a service may be considered medically necessary

Laser treatment with pulsed dye lasers may be **medically necessary** for port wines stains causing functional impairment. Functional impairment may include, but is not limited to:

1. Lesions located where there is potential compromise or actual compromise (see numbers 3 and 4 below) of vital structures (e.g. nose, eyes, ears, lips, tongue or larynx)
2. Lesions which are symptomatic (e.g. bleeding, painful, ulcerated, prior infection, or pedunculated and symptomatic)
3. Lesions which involve the eyelids or periorbital tissue and result in impaired vision or strabismus
4. Lesions which result in auditory impairment and secondary speech delay (lesions which

are located on or around the ear)

5. Lesions which result in a risk of bleeding caused by bleb formation or incidental trauma

Given the higher rate of complications, laser treatment with alexandrite, Nd:YAG lasers, and intense pulsed light (IPL) may be **medically necessary** for port wine stains which qualify for treatment as listed above but also meet the following criteria:

- 1) Have failed treatment with pulsed dye laser. **OR**
- 2) Darker skin pigmentation precludes treatment with the pulsed dye laser.

When a service is considered investigational

Treatment of port wine stains with lasers in combination with photodynamic therapy or topical angiogenesis inhibitors is considered **investigational**.

For all other indications that are not listed as medically necessary, not medically necessary or an exclusion.

Policy Guidelines

Performance of a prior spot test is necessary to select suitable candidates for treatment and to determine the degree of scarring that may occur.

The size of the lesion may require more than 1 treatment.

Reference Resources

1. Faurischou A, Olesen AB, Leonardi-Bee J, et al. Lasers or light sources for treating port-wine stains. *Cochrane Database Syst Rev*. 2011(11):CD007152. PMID 22071834
2. Faurischou A, Togsverd-Bo K, Zachariae C, et al. Pulsed dye laser vs. intense pulsed light for port-wine stains: a randomized side-by-side trial with blinded response evaluation. *Br J Dermatol*. Feb 2009;160(2):359-364. PMID 19120324
3. Babilas P, Schreml S, Eames T, et al. Split-face comparison of intense pulsed light with short- and long-pulsed dye lasers for the treatment of port-wine stains. *Lasers Surg Med*. Oct 2010;42(8):720-727. PMID 20886506
4. Klein A, Szeimies RM, Baumler W, et al. Indocyanine green-augmented diode laser treatment of port-wine stains: clinical and histological evidence for a new treatment option from a randomized controlled trial. *Br J Dermatol*. Aug 2012;167(2):333-342. PMID 22435991
5. Passeron T, Maza A, Fontas E, et al. Treatment of port wine stains with pulsed dye laser and topical timolol: a multicenter randomized controlled trial. *Br J Dermatol*. Dec 6 2013. PMID 24641096
6. Tremaine AM, Armstrong J, Huang YC, et al. Enhanced port-wine stain lightening achieved with combined treatment of selective photothermolysis and imiquimod. *J Am Acad Dermatol*. Apr 2012;66(4):634-641. PMID 22244840
7. Bjerring P, Christiansen L, Troilius A et al. Intense pulsed light source for the treatment of dye laser resistant port-wine stains. *J Cosmet Laser Ther*. 2003;5(1):7. PMID 12745594

8. Stier MF, Glick SA, Hirsch RJ Laser treatment of pediatric vascular lesions: Port wine stains and hemangiomas. J Am Acad Dermatol. 2008;58(2):261. PMID 18068263
9. UpToDate: Port Wine Stains. Last update Oct 5, 2020.
10. UpToDate: Laser and Light Therapy for Cutaneous Vascular Lesions. Last update Apr 18, 2018.

Document Precedence

Blue Cross and Blue Shield of Vermont (BCBSVT) Medical Policies are developed to provide clinical guidance and are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. The applicable group/individual contract and member certificate language, or employer's benefit plan if an ASO group, determines benefits that are in effect at the time of service. Since medical practices and knowledge are constantly evolving, BCBSVT reserves the right to review and revise its medical policies periodically. To the extent that there may be any conflict between medical policy and contract/employer benefit plan language, the member's contract/employer benefit plan language takes precedence.

Audit Information

BCBSVT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, BCBSVT reserves the right to recoup all non-compliant payments.

Administrative and Contractual Guidance

Benefit Determination Guidance

NEHP/ABNE members may have different benefits for services listed in this policy. To confirm benefits, please contact the customer service department at the member's health plan.

Federal Employee Program (FEP): Members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Benefit Plan Brochure. It is important to verify the member's benefits prior to providing the service to determine if benefits are available or if there is a specific exclusion in the member's benefit.

Coverage varies according to the member's group or individual contract. Not all groups are required to follow the Vermont legislative mandates. Member Contract language takes precedence over medical policy when there is a conflict.

If the member receives benefits through an Administrative Services Only (ASO) group, benefits may vary or not apply. To verify benefit information, please refer to the member's employer benefit plan documents or contact the customer service department. Language in the employer benefit plan documents takes precedence over medical policy when there is a conflict.

Policy Implementation/Update information

08/2016	New policy. Adoption of BCBSA MPRM# 7.01.40.
08/2017	Policy reviewed. Prior Approval requirement removed.
11/2018	Policy reviewed. Pulse Dye Lasers “PDL” moved to the preferred initial treatment. Other laser treatments with more side effects reserved for treatment failure with PDL. External input received from two tertiary care center pediatric dermatology departments.
11/2019	Policy Reviewed. No change in policy statement.
02/2021	Policy Reviewed. No change in policy statement.

Eligible providers

Qualified healthcare professionals practicing within the scope of their license(s).

Approved by BCBSVT Medical Directors Date Approved

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Attachment I Code Table & Instructions

The following codes will be considered as Medically Necessary when applicable criteria has been met.		
Code Type	Number	Brief Description
CPT®	17106	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); less than 10 sq. cm
CPT®	17107	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); 10.0 to 50.0 sq. cm
CPT®	17108	Destruction of cutaneous vascular proliferative lesions (eg, laser technique); over 50.0 sq. cm
ICD-10-CM	Q82.5	Congenital non-neoplastic nevus (includes port wine nevus)