



MASSACHUSETTS

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Medical Policy Photocoagulation of Macular Drusen

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Policy Number: 607

BCBSA Reference Number: 9.03.11A

LCD/NCD: N/A

Related Policies

- Transpupillary Thermotherapy for Treatment of Choroidal Neovascularization, #[600](#)
- Photodynamic Therapy for Choroidal Neovascularization, #[599](#)

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Destruction of macular drusen with laser therapy is considered [NOT MEDICALLY NECESSARY](#).

Prior Authorization Information

Pre-service approval is required for all inpatient services for all products.

See below for situations where prior authorization may be required or may not be required for outpatient services.

Yes indicates that prior authorization is required.

No indicates that prior authorization is not required.

N/A indicates that this service is primarily performed in an inpatient setting.

	Outpatient
Commercial Managed Care (HMO and POS)	This is not a covered service.
Commercial PPO and Indemnity	This is not a covered service.
Medicare HMO BlueSM	This is not a covered service.
Medicare PPO BlueSM	This is not a covered service.

CPT Codes / HCPCS Codes / ICD Codes

The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

There is no specific CPT code for this procedure.

Description

Photocoagulation describes the use of focused laser energy to treat disease. Laser photocoagulation of macular drusen has been evaluated as a method of slowing progression to advanced age-related macular degeneration (AMD).

AMD is a painless, insidious process. In its earliest stages, it is characterized by minimal visual impairment and the presence of large or “soft” drusen, ie, subretinal accumulations of cellular debris adjacent to the basement membrane of the retinal pigment epithelium.

Large drusen appear as large, pale yellow or pale gray domed elevations and result in thickening of the space between the retinal pigment epithelium and its blood supply, the choriocapillaris. Clinical and epidemiologic studies have shown that the presence of large and/or numerous soft drusen is associated with an increased risk of the development of choroidal neovascularization (CNV) in eyes with AMD. For example, in patients with bilateral drusen, the 3-year risk of developing CNV is estimated to be 13%, rising to 18% for those older than age of 65 years. The emergence of CNV greatly increases the risk of subsequent irreversible loss of vision.

Two different kinds of low energy laser therapies, argon and infrared laser, have been investigated as techniques to eliminate drusen by photocoagulation in an effort to prevent the evolution to CNV, ultimately leading to improved preservation of vision. The lasers used are those that are widely used for standard photocoagulation of extrafoveal CNV. Therefore, the treatment of macular drusen represents an additional indication for an existing laser approved by the U.S. Food and Drug Administration (FDA). Photocoagulation describes the use of focused laser energy to treat disease. Laser photocoagulation of macular drusen has been evaluated as a method of slowing progression to advanced age-related macular degeneration (AMD).

Summary

Evidence from multiple trials indicates that drusen ablation does not prevent visual loss, CNV, or AMD. Furthermore, the evidence from trials indicates that drusen ablation may be accompanied by harm. The literature indicates that photocoagulation of macular drusen procedure is not clinically appropriate; this approach is considered not medically necessary.

Policy History

Date	Action
7/2016	BCBSA National policy review. Not medically necessary statement clarified. 7/1/2016
8/2014	Medical policy ICD10 remediation: Formatting, editing and coding updates. No changes to policy statements.
4/2010	Comparison review of the BCBSA National medical policy; not medically necessary; non-coverage clarified.
8/2008	Comparison review of the BCBSA National medical policy; not medically necessary.
8/2007	Comparison review of the BCBSA Medical policy; not medically necessary.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

References

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2. Frennesson IC, Nilsson SE. Effects of argon (green) laser treatment of soft drusen in early age-related maculopathy: a 6 month prospective study. *Br J Ophthalmol* 1995; 79(10):905-9.
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5. Ho AC, Maguire MG, Yoken J et al. Laser-induced drusen reduction improves visual function at 1 year. Choroidal Neovascularization Prevention Trial Research Group. *Ophthalmology* 1999; 106(7):1367-73.
6. The Choroidal Neovascularization Prevention Trial Research Group. Choroid neovascularization in the Choroidal Neovascular Prevention Trial. *Ophthalmology* 1998; 105(8):1364-72.
7. The Choroidal Neovascularization Prevention Trial Research Group. Laser treatment in fellow eyes with large drusen: updated findings from a pilot randomized clinical trial. *Ophthalmology* 2003; 110(5):971-8.
8. Complications of Age-Related Macular Degeneration Prevention Trial Research Group. Laser treatment in patients with bilateral large drusen: the complications of age-related macular degeneration prevention trial. *Ophthalmology* 2006; 113(11):1974-86.
9. Olk RJ, Friberg TR, Stickney KL et al. Therapeutic benefits of infrared (810-nm) diode laser macular grid photocoagulation in prophylactic treatment of nonexudative age-related macular degeneration: two-year results of a randomized pilot study. *Ophthalmology* 1999; 106(11):2082-90.
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11. Owens SL, Bunce C, Brannon AJ et al. Prophylactic laser treatment hastens choroidal neovascularization in unilateral age-related maculopathy: final results of the drusen laser study. *Am J Ophthalmol* 2006; 141(2):276-81.
12. Friberg TR, Brennen PM, Freeman WR et al; PTAMD Study Group. Prophylactic treatment of age-related macular degeneration report number 2: 810-nanometer laser to eyes with drusen: bilaterally eligible patients. *Ophthalmic Surg Lasers Imaging* 2009; 40(6):530-8.
13. Parodi MB, Virgili G, Evans JR. Laser treatment of drusen to prevent progression to advanced age-related macular degeneration. *Cochrane Database Syst Rev* 2009; (3):CD006537.
14. American Academy of Ophthalmology. Age-Related Macular Degeneration, Preferred Practice Pattern. San Francisco: American Academy of Ophthalmology, 2006. Available online at: www.aao.org/ppp. Last accessed May 2011.