Intraocular Pressure Measurements During Vitrectomy Surgery

**Description:**

Vitrectomy is a microsurgical procedure which involves removing the vitreous humor (the transparent gelatinous substance which fills the eyeball behind the crystalline lens) and replacing it with saline solution. Vitrectomy may be used for complications of diabetic retinopathy, traumatic penetrating ocular injury, non-diabetic vitreous hemorrhage, infectious endophthalmitis, and cataract extractions which are complicated by an underlying inflammatory condition or involves loss of the vitreous humor.

Intraocular pressure (IOP) fluctuations that occur during vitrectomy may damage susceptible ocular tissues. Current direct measurement methods involve an addition incision in the eye and insertion of a pressure-sensing catheter transducer. New noninvasive indirect measurement technology is being studied. This indirect method utilizes a disposable pressure transducers installed in the infusion line to measure IOP. Moorhead, et al. (2005) performed a clinical study involving 10 vitrectomy patients in which the IOP was simultaneously measured by direct method and the indirect method. The measured IOP ranged from 0 to 120 mmHg during the vitrectomy. The indirectly measured IOP accurately corresponded with the directly measured IOP.

Although initial results of indirect measurement of IOP seem promising, further large-scale studies with follow-up are needed. The current published clinical data is insufficient to determine the long-term health outcomes of indirect IOP measurement.

**Medical Criteria:**

Not applicable.

**Policy:**

Indirect measurement of intraocular pressure is considered not medically necessary due to lack of published peer-reviewed clinical data which demonstrates improved health outcomes.

**Coverage:**

Benefits may vary between groups/contracts. Please refer to the appropriate evidence of coverage, subscriber agreement or Rite Care contract for applicable not medically necessary benefits/coverage.

**Coding:**

The following code is not medically necessary:

0173T

**Published:**

*Provider Update*, October 2009
*Provider Update*, December 2010

**References:**


This medical policy is made available to you for informational purposes only. It is not a guarantee of
payment or a substitute for your medical judgement in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions.

This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice.