

Evidence Based Guideline

Balloon Valvuloplasty, Percutaneous

File Name: balloon_valvuloplasty_percutaneous
Guideline Number: EBG.SUR6550
Origination: 6/1994
Last Review: 11/2003

Active guideline, no longer scheduled for routine literature review.

Description of Procedure or Service

Percutaneous balloon valvuloplasty is a non-surgical method of treating **stenosis** of the pulmonary, mitral, and/or aortic valves of the heart. It involves inserting one or more balloons into the aortic, mitral, or pulmonary valves. The balloons are then inflated to decrease the obstruction within the valve. For pulmonary valvuloplasty, a balloon-tipped catheter is passed from the femoral vein (in the thigh) into the right upper chamber of the heart (atria). From there it is threaded to the right lower chamber (ventricle) and on to the pulmonic valve. By puncturing the wall between the upper chambers (atrial septum), the surgeon has access to either the mitral or aortic valves. The femoral artery can also be used to approach the aortic valve, avoiding septal puncture. When the balloon is positioned in the valve, a series of inflation-deflation cycles is used to eliminate or reduce the obstruction.

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- **Aortic Valve:** **Percutaneous** balloon valvuloplasty is considered eligible for coverage for aortic **stenosis** in patients who are poor candidates for aortic valve replacement surgery.
- **Mitral Valve:** **Percutaneous** balloon valvuloplasty is considered eligible for coverage for symptomatic mitral valve **stenosis** that meets the criteria of the New York Heart Association (NYHA) from classifications II to IV. Please see Table I: “New York Heart Association (NYHA) Functional Classification”.
- **Pulmonic Valve:** **Percutaneous** balloon valvuloplasty is considered eligible for coverage for pulmonic valve **stenosis** in patients who have an otherwise typically formed valve.

Table I

Class I	Ordinary physical activity does not cause symptoms
Class II	Comfortable at rest, ordinary physical activity causes symptoms
Class III	Comfortable at rest, less than ordinary activity causes symptoms
Class IV	Symptoms at rest

Medical Evidence regarding Balloon Valvuloplasty, Percutaneous indicates it is

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not recommended in the following situations:

Percutaneous Balloon Valvuloplasty is not recommended for the following:

- Aortic Valve: Patients who are candidates for aortic valve replacement surgery.
- Mitral Valve: Patients who have asymptomatic mitral valve stenosis.
- Pulmonic Valve: Patients with dysplastic valves, pulmonary atresia, or other malformations that complicate the stenosis.

Benefits Application

Please refer to certificate for availability of benefit. This guideline relates only to the services or supplies described herein. Benefits may vary according to benefit design; therefore certificate language should be reviewed before applying the terms of the policy.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: 92986, 92987, 92990

Medical Term Definitions

Dysplastic valves

heart valves that are abnormally developed in size, shape and/or cell structure.

Percutaneous

performed through the skin; for example an injection or biopsy.

Stenosis

narrowing, hardening or constriction of a vessel.

Scientific Background and Reference Sources

Center for Devices and Radiological Health - January 1989

FDA - Department of Health and Human Services - 1988 and 1990

BCBSA Medical Policy Reference Manual - 12/95

Boston Scientific Corporation - Correspondence - 1999

Specialty Matched Consultant Advisory Panel - 11/1999

Medical Policy Advisory Group - 12/2/1999

Specialty Matched Consultant Advisory Panel - 12/2001

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BCBSA Medical Policy Reference Manual, 7.01.17, 7/12/2002

Specialty Matched Consultant Advisory Panel - 11/2003

Policy Implementation/Update Information

- 5/87 Evaluated: Eligible for coverage for pulmonic valve stenosis
- 3/88 Reviewed: Eligible for coverage for pulmonic valve stenosis. All other indications investigational.
- 7/91 Evaluated: Eligible for coverage for aortic valve stenosis in adults who are poor surgical candidates.
- 6/94 Evaluated 4/94 and device received FDA approval 6/94: Eligible for coverage for symptomatic mitral valve stenosis that meets NYHA classification II to IV.
- 7/96 Reaffirmed: National Association reviewed 12/95. No changes.
- 2/99 Reviewed: Removed “adults” under Policy section of aortic valve. Replaced with “patients”.
- 5/99 Reformatted; “Description of Procedure or Service” changed, Medical Term Definitions added.
- 12/99 Reaffirmed, Medical Policy Advisory Group
- 10/00 System coding changes.
- 7/01 Changed policy name from Percutaneous Balloon Valvuloplasty to Balloon Valvuloplasty, Percutaneous.
- 12/01 Specialty Matched Consultant Advisory Panel review. No changes to criteria.
- 07/02 Billing/Coding section updated. Code 92900 corrected to 92990.
- 11/03 Specialty Matched Consultant Advisory Panel review. No changes to criteria. Changes to policy format. Status change to Active policy, no longer scheduled for routine literature review.
- 9/18/06 Medical Policy changed to Evidence Based Guideline. (adn)

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.