

EFFECTIVE DATE: 05|01|2017

POLICY LAST UPDATED: 04|03|2018

OVERVIEW

Surgical ventricular restoration (SVR) is designed to restore or remodel the left ventricle to its normal, spherical shape and size in patients with akinetic segments of the heart, secondary to ischemic dilated cardiomyopathy.

This policy is applicable to Commercial Products only. For BlueCHiP for Medicare, see related policy section.

PRIOR AUTHORIZATION

Prior authorization is not required.

POLICY STATEMENT

Commercial Products

Surgical ventricular restoration is considered not medically necessary as the evidence is insufficient to determine the effects of the technology on health outcomes.

For BlueCHiP for Medicare, see related policy section for the BlueCHiP for Medicare National and Local Coverage Determinations policy.

MEDICAL CRITERIA

Not applicable

BACKGROUND

Surgical ventricular restoration (SVR) is also known as surgical anterior ventricular endocardial restoration (SAVER), left ventricular reconstructive surgery, endoventricular circular plasty, or the Dor procedure (named after Vincent Dor, MD). Dr. Dor pioneered the expansion of techniques for ventricular reconstruction and is credited with treating heart failure patients with SVR and coronary artery bypass grafting (CABG).

SVR is usually performed after CABG and may precede or be followed by mitral valve repair or replacement and other procedures such as endocardectomy and cryoablation for treatment of ventricular tachycardia. A key difference between SVR and ventriculectomy (ie, for aneurysm removal) is that, in SVR, circular “purse string” suturing is used around the border of the aneurysmal scar tissue. Tightening of this suture is believed to isolate the akinetic or dyskinetic scar, bring the healthy portion of the ventricular walls together, and restore a more normal ventricular contour. If the defect is large (ie, an opening >3 cm), the ventricle may also be reconstructed using patches of autologous or artificial material to maintain the desired ventricular volume and contour during closure of the ventriculotomy. In addition, SVR is distinct from partial left ventriculectomy (ie, the Batista procedure), which does not attempt to specifically resect akinetic segments and restore ventricular contour.

The Surgical Treatment of Ischemic Heart Failure trial, did not report significant improvements in quality of life outcomes for patients undergoing SVR as an adjunct to standard coronary artery bypass grafting surgery. Several uncontrolled studies have suggested that SVR can improve hemodynamic functioning in selected

patients with ischemic cardiomyopathy; however, these studies are considered lower quality evidence. For individuals who have ischemic dilated cardiomyopathy who receive SVR as an adjunct to coronary artery bypass grafting, the evidence is insufficient to determine the effects of the technology on health outcomes. Therefore, the service is considered not medically necessary.

REGULATORY STATUS

In 2004, the CorRestore™ Patch System (Somanetics; acquired by Medtronic) was cleared for marketing by the U.S. Food and Drug Administration through the 510(k) process for use “as an intracardiac patch for cardiac reconstruction and repair.” The device consists of an oval tissue patch made from glutaraldehyde-fixed bovine pericardium. It is identical to other marketed bovine pericardial patches, except that it incorporates an integral suture bolster in the shape of a ring that is used along with ventricular sizing devices to restore the normal ventricular contour.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate section of the Benefit Booklet, Evidence of Coverage, or Subscriber Agreement for services not medically necessary.

CODING

Commercial Products

The following CPT code is not medically necessary

33548 Surgical ventricular restoration procedure, includes prosthetic patch, when performed (eg, ventricular remodeling, SVR, SAVER, Dor procedures)

RELATED POLICIES

BlueCHIP for Medicare National and Local Coverage Determinations

PUBLISHED

Provider Update, June 2018

Provider Update, May 2017

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