Medical Policy
Surgical Ventricular Restoration

Table of Contents
- Policy: Commercial
- Policy: Medicare
- Authorization Information
- Coding Information
- Description
- Policy History
- Information Pertaining to All Policies
- References

Policy Number: 544
BCBSA Reference Number: 7.01.103

Related Policies
None

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

Surgical ventricular restoration is INVESTIGATIONAL for the treatment of ischemic dilated cardiomyopathy or post-infarction left ventricular aneurysm.

Prior Authorization Information
Commercial Members: Managed Care (HMO and POS)
This is NOT a covered service.

Commercial Members: PPO, and Indemnity
This is NOT a covered service.

Medicare Members: HMO BlueSM
This is NOT a covered service.

Medicare Members: PPO BlueSM
This is NOT a covered service.

CPT Codes / HCPCS Codes / ICD-9 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. A draft of future ICD-10 Coding related to this document, as it might look today, is included below for your reference.
Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

### CPT Codes

<table>
<thead>
<tr>
<th>CPT codes:</th>
<th>Code Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>33548</td>
<td>Surgical ventricular restoration procedure, includes prosthetic patch, when performed (e.g., ventricular remodeling, SVR, SAVER, Dor procedures)</td>
</tr>
</tbody>
</table>

### ICD-9 Diagnosis Coding

<table>
<thead>
<tr>
<th>ICD-9-CM diagnosis codes:</th>
<th>Code Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>411.0</td>
<td>Postmyocardial infarction syndrome</td>
</tr>
<tr>
<td>414.8</td>
<td>Other specified forms of chronic ischemic heart disease</td>
</tr>
</tbody>
</table>

### ICD-10 Diagnosis Coding

<table>
<thead>
<tr>
<th>ICD-10-CM diagnosis codes:</th>
<th>Code Description</th>
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</thead>
<tbody>
<tr>
<td>I24.1</td>
<td>Dressler's syndrome</td>
</tr>
<tr>
<td>I25.5</td>
<td>Ischemic cardiomyopathy</td>
</tr>
<tr>
<td>I25.6</td>
<td>Silent myocardial ischemia</td>
</tr>
<tr>
<td>I25.89</td>
<td>Other forms of chronic ischemic heart disease</td>
</tr>
<tr>
<td>I25.9</td>
<td>Chronic ischemic heart disease, unspecified</td>
</tr>
</tbody>
</table>

### Description

Surgical ventricular restoration (SVR) is a procedure 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 either dilated cardiomyopathy or post-infarction left ventricular aneurysm.

The surgical ventricular restoration (SVR) procedure may also be referred to as ventricular remodeling, surgical anterior ventricular endocardial restoration (SAVER), left ventricular reconstructive surgery, left ventricular aneurysmectomy reconstruction, endoventricular circular plasty, or the Dor procedure. The SVR procedure is usually performed after CABG and may proceed 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 (i.e., 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 (i.e., 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 (i.e., the Batista procedure), which does not attempt to specifically resect akinetic segments and restore ventricular contour.

An example of a surgical ventricular restoration device for cardiac reconstruction and repair is the CorRestore™ Patch System from Samanetics Corporation. All surgical ventricular restoration is considered investigational regardless of the commercial name, the manufacturer, or FDA approval status.

### Summary

A number of uncontrolled studies have suggested that surgical ventricular restoration can improve the hemodynamic functioning in selected patients with ischemic cardiomyopathy. However, the pivotal RCT, the STICH trial, did not report any improvements in clinical outcomes or quality-of-life measures for
patients undergoing SVR in addition to standard CABG surgery. As a result of these data, the impact of SVR on net health outcome remains uncertain. SVR is considered investigational.

**Policy History**

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>7/2014</td>
<td>Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.</td>
</tr>
<tr>
<td>12/2013</td>
<td>New references from BCBSA National medical policy.</td>
</tr>
<tr>
<td>1/1/2012</td>
<td>New policy, effective 1/1/2012, describing ongoing non-coverage.</td>
</tr>
</tbody>
</table>

**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
- Medical Technology Assessment Guidelines

**References**