Medical Policy

Tilt Table Testing

<table>
<thead>
<tr>
<th>Type:</th>
<th>Medical Necessity/Not Medical Necessity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Specific Section:</td>
<td>Medicine</td>
</tr>
</tbody>
</table>

| Original Policy Date: | December 7, 2006 |
| Effective Date: | September 27, 2013 |

Definitions of Decision Determinations

**Medically Necessary:** A treatment, procedure or drug is medically necessary only when it has been established as safe and effective for the particular symptoms or diagnosis, is not investigational or experimental, is not being provided primarily for the convenience of the patient or the provider, and is provided at the most appropriate level to treat the condition.

**Investigational/Experimental:** A treatment, procedure or drug is investigational when it has not been recognized as safe and effective for use in treating the particular condition in accordance with generally accepted professional medical standards. This includes services where approval by the federal or state governmental is required prior to use, but has not yet been granted.

**Split Evaluation:** Blue Shield of California / Blue Shield of California Life & Health Insurance Company (Blue Shield) policy review can result in a Split Evaluation, where a treatment, procedure or drug will be considered to be investigational for certain indications or conditions, but will be deemed safe and effective for other indications or conditions, and therefore potentially medically necessary in those instances.

Description

Neurally mediated syncope, also known as reflex syncope, traditionally refers to a heterogeneous group of conditions in which cardiovascular reflexes that are normally useful in controlling the circulation become intermittently inappropriate, in response to a trigger, resulting in vasodilatation and/or bradycardia and thereby in a fall in arterial blood pressure and global
The term neurocardiogenic syncope (NCS) is used to describe spells of transient cerebral hypoperfusion in the absence of a demonstrable cardiac cause. The tilt table or head-up tilt test is used to diagnose NCS by evaluating autonomic nervous system control of cardiovascular function.

The tilt table is a motorized table designed specifically for use in a cardiac catheterization or electrophysiology laboratory. This table differs from tilt tables used in radiology and physical therapy departments. The tilt table must change the patient's position from 0 degrees to 60 degrees in less than 10 seconds, and be able to restore the patient equally quickly to a supine position, with proper restraints. Heart rate and blood pressure are monitored and syncope observed. If symptoms of syncope occur in the upright position they almost immediately resolve when the patient assumes the supine position. If the tilt table test does not produce symptoms of syncope, pharmacologic provocation (i.e., isoproterenol, nitroglycerine) may be incorporated to dilate the peripheral vessels and drop the blood pressure during the testing, in order to produce symptoms.

Policy

Tilt table testing, alone or in combination with administration of provocative agents (e.g., isoproterenol), may be considered medically necessary for the classification of neurocardiogenic syncope when all the following criteria are met:

- Cardiac causes have been excluded by a thorough history and physical examination and appropriate cardiac diagnostic testing (See Policy Guideline)
- Medications that may contribute to syncope have been evaluated, adjusted or discontinued as appropriate (e.g., antihistamines, tranquilizers, sleep aids, antiarrhythmic medications)
- Comorbid conditions (e.g., anemia, hypothyroidism) have been evaluated and treated as appropriate

Other applications of tilt table testing not meeting the criteria above are considered not medically necessary.

Policy Guideline

Diagnostic Criteria to Establish the Diagnosis of Neurocardiogenic Syncope

Commonly accepted diagnostic criteria to establish the diagnosis of neurocardiogenic syncope (also known as reflex syncope) include:

- Classical vasovagal syncope: Diagnosed if syncope is precipitated by emotional distress (such as fear, severe pain, instrumentation, blood phobia) or prolonged standing and is associated with typical prodromal symptoms due to autonomic activation (intense pallor, sweating, nausea, feeling of warmth, odd sensation in the abdomen, and light headedness or dizziness).
• Situational syncope: Diagnosed if syncope occurs during or immediately after specific triggers including:
  o Gastrointestinal stimulation (swallow, defecation, visceral pain)
  o Micturition
  o Post-exercise
  o Post-prandial
  o Cough, sneeze
  o Others (e.g., laughing, brass instrument playing, weightlifting)

**Cardiac Diagnostic Testing**

*Initial Evaluation:*

• Detailed history including:
  o Cardiovascular and neurological conditions, past history of trauma
  o Assessment of medications that are associated with proarrhythmia (e.g., Class IA and IC antiarrhythmic drugs) –see Table below
  o Aggravating and alleviating factors

• Physical exam including evaluation for:
  o Orthostatic hypotension (orthostatic blood pressures [BP] measurements)
  o Carotid bruits, heart murmurs
  o Neurological and gait disturbances

• 12-lead electrocardiogram (ECG, EKG)

The initial evaluation may lead to a certain diagnosis (e.g., reflex [neurally mediated] syncope, orthostatic hypotension, cardiac or cardiovascular [arrhythmia or structural cardiac]). A diagnosis of neurocardiogenic syncope is considered when there is no structural heart disease and the ECG is normal. If these measures are diagnostic for orthostatic hypotension or neurocardiogenic syncope then no further workup is required.

*If the syncope remains unexplained, the evaluation should also include:*

• Echocardiogram when a diagnosis is not provided by the history, physical exam, and ECG or if underlying heart disease is suspected
• Ischemia evaluation in patients at risk for or with a history of coronary artery disease
• Exercise tolerance testing (ETT) should be performed in the patient with unexplained syncope, especially if the episode was exercise related.
• Holter monitoring for episodes that occur at least every day
• Event monitoring for episodes that occur at least once a month
• An implantable loop monitor for patient in whom symptoms are infrequent

**Class IA and Class IC Antiarrhythmic Drugs (Sodium Channel Blockers)**

<table>
<thead>
<tr>
<th>Class IA</th>
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<tbody>
<tr>
<td></td>
<td>Quinidine</td>
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<td></td>
<td>Procainamide</td>
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<table>
<thead>
<tr>
<th>Class IC</th>
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<tbody>
<tr>
<td>- Disopyramide</td>
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<tr>
<td>- Flecainide</td>
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<tr>
<td>- Propafenone</td>
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<td>- Moricizine</td>
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Documentation Required for Clinical Review

- History and Physical and/or Consultation notes including:
  - Cardiac diagnostic test results (e.g., 12-lead electrocardiogram [ECG], echocardiogram, formal exercise tolerance testing [ETT])
  - Clinical reason for tilt table testing
  - Other diagnostic testing results
- Physician progress notes, consultation reports (if applicable)
- Cardiac diagnostic testing reports (e.g., 12-lead ECG, echocardiogram, formal ETT)

Post Service

- Tilt table testing procedure report

The materials provided to you are guidelines used by this plan to authorize, modify, or deny care for persons with similar illness or conditions. Specific care and treatment may vary depending on individual need and the benefits covered under your contract. These Policies are subject to change as new information becomes available.