Diagnosis and Management of Idiopathic Environmental Illness/Intolerance (IEI) (ie, Multiple Chemical Sensitivities)
Corporate Medical Policy

Description/Summary

Idiopathic environmental illness/intolerance (IEI) (also known as multiple chemical sensitivities or clinical ecology) is typically characterized by recurrent, nonspecific symptoms that the patient or clinician believes are provoked by low levels of exposure to chemical, biologic, or physical agents. Reported symptoms are wide-ranging, and there are not clearly established diagnostic criteria. Various tests (eg, nutritional assessment) and treatments (eg, immunoglobulin therapy [IVIg]) have been proposed.

There is a lack of clear diagnostic criteria for idiopathic environmental intolerance and a lack of evidence on the diagnostic accuracy of laboratory or other tests for this condition. Overall, studies using existing criteria have not found that subjects diagnosed with the condition can reliably distinguish between chemical exposure and placebo. Moreover, studies have not consistently found that low-level electromagnetic field exposure affects objective outcomes (eg, heart rate or cognitive function). In addition, there is a lack of controlled studies to evaluate treatments for idiopathic environmental intolerance. Thus, all tests and treatments for this condition are considered investigational.

Policy

Coding Information

There are no specific procedure codes for testing or treatment of idiopathic environmental illness (IEI). A wide variety of codes could be used.

When a service is considered investigational

All diagnoses for the diagnosis and management of idiopathic environmental intolerance (IEI) are considered investigational.

Laboratory tests designed to affirm the diagnosis of idiopathic environmental illness are considered investigational.
Treatment of idiopathic environmental illness/intolerance, including by not limited to intravenous immune globulin (IVIG), avoidance therapy, elimination diets, neutralizing therapy of chemical and food extracts, and oral nystatin (to treat "candidiasis hypersensitivity syndrome") is considered investigational.

**Policy Guidelines**

Laboratory tests for the diagnosis of idiopathic environmental illness/intolerance may be broadly subdivided into those intended to rule out specific diseases with well-defined presentations and diagnostic criteria and those tests designed to affirm the diagnosis of idiopathic environmental illness/intolerance. For example, a basic diagnostic workup, including a complete blood count, standard panel of chemistry tests and basic urinalysis (with micro if indicated) would be considered appropriate as an initial diagnostic step, even in patients with nonspecific symptoms, to rule out well defined illnesses. Additional tests may be considered medically necessary in patients with more specific symptoms, suggestive, for example, of an autoimmune connective tissue disease, or infectious mononucleosis. A variety of psychiatric or psychologic assessments may be performed to assess underlying conditions. However, at the present time, no specific tests can confirm the diagnosis of idiopathic environmental intolerance, and thus, a large battery of tests performed for a patient with nonspecific symptoms must be reviewed carefully for medically necessity. For example, the following should be reviewed closely, particularly when ordered simultaneously: laboratory tests of immune function (ie, lymphocyte transformation, deregulation of the 2,5A RNase L antiviral pathway), lymphocyte subsets (eg, natural killer cells, CD4, CD8), immunoglobulin levels (eg, IgG, IgE), levels of trace minerals in the serum or urine (eg, selenium, manganese, mercury), antibodies for a variety of infectious agents simultaneously, allergy services (including provocation testing), positron emission tomography scans, or neuropsychologic testing and elaborate nutritional assessment, including intracellular micronutrient assays.

In addition, such treatments as IVIG therapy, provocation therapy, or counseling regarding specific avoidance environments or elimination diets would be considered investigational in the absence of specific symptoms.

**Reference Resources**

Blue Cross and Blue Shield Association Medical Policy Reference Manual; 2.01.01 Diagnosis and Management of Idiopathic Environmental Intolerance (archived 5/2015)

UpToDate® review 5/29/2019

**Peer Reviewed Publications:**


Related Policies

Nutrient/Nutritional Panel Testing & Intracellular Micronutrient Analysis Selected Blood, Serum and Cellular Allergy and Toxicity Tests

Document Precedence

Blue Cross and Blue Shield of Vermont (BCBSVT) Medical Policies are developed to provide clinical guidance and are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. The applicable group/individual contract and member certificate language, or employer’s benefit plan if an ASO group, determines benefits that are in effect at the time of service. Since medical practices and knowledge are constantly evolving, BCBSVT reserves the right to review and revise its medical policies periodically. To the extent that there may be any conflict between medical policy and contract/employer benefit plan language, the member’s contract/employer benefit plan language takes precedence.

Audit Information

BCBSVT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, BCBSVT reserves the right to recoup all non-compliant payments.

Administrative and Contractual Guidance

Benefit Determination Guidance

Federal Employee Program (FEP): Members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Benefit Plan Brochure. It is important to verify the member’s benefits prior to providing the service to determine if benefits are available or if there is a specific exclusion in the member’s benefit.

Coverage varies according to the member’s group or individual contract. Not all groups are required to follow the Vermont legislative mandates. Member Contract language takes
precedence over medical policy when there is a conflict.

If the member receives benefits through an Administrative Services Only (ASO) group, benefits may vary or not apply. To verify benefit information, please refer to the member’s employer benefit plan documents or contact the customer service department. Language in the employer benefit plan documents takes precedence over medical policy when there is a conflict.

Policy Implementation/Update information

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>06/2016</td>
<td>New Policy</td>
</tr>
<tr>
<td>03/2017</td>
<td>Policy reviewed, no changes in policy statement.</td>
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<tr>
<td>05/2018</td>
<td>Policy reviewed, no changes in policy statement.</td>
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<tr>
<td>06/2018</td>
<td>Policy statement added: Treatment of idiopathic environmental illness/intolerance, including by not limited to intravenous immune globulin (IVIG), avoidance therapy, elimination diets, neutralizing therapy of chemical and food extracts, and oral nystatin (to treat “candidiasis hypersensitivity syndrome”) is considered investigational. Updated references.</td>
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<tr>
<td>6/2019</td>
<td>Policy reviewed, no changes in policy statement. Updated references and updated policy guidelines section to affirm the diagnosis of idiopathic environmental/illness section.</td>
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Eligible providers

Qualified healthcare professionals practicing within the scope of their license(s).

Approved by BCBSVT Medical Director(s)  Date Approved

Joshua Plavin, MD, MPH, MBA  
Chief Medical Officer

Kate McIntosh, MD, MBA, FAAP  
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