MEDICAL POLICY – 2.01.26
Prolotherapy

BCBSA Ref. Policy: 2.01.26

Effective Date: Jan. 1, 2018
Last Revised: Dec. 6, 2017
Replaces: N/A

RELATED MEDICAL POLICIES:

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<td>Recombinant and Autologous Platelet-Derived Growth Factors as a Treatment of Wound Healing and Other Conditions</td>
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<td>2.01.98</td>
<td>Orthopedic Applications of Platelet-Rich Plasma</td>
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POLICY CRITERIA | CODING | RELATED INFORMATION
EVIDENCE REVIEW | REFERENCES | HISTORY

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Introduction

Prolotherapy therapy (proliferative therapy) is a method to try to heal joints and connective tissue. A solution is injected in the area. The solution irritates the tissue, causing inflammation. This inflammation is supposed to stimulate the body’s natural healing response. These injections are repeated over time. The hope is to gradually build up new issue in the injured area and restore strength. Prolotherapy is investigational (unproven). The studies that have been done are small and don’t show substantial improvement. There’s not enough medical evidence to show if this technique works.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria
### Service | Investigational
--- | ---
**Prolotherapy** | **Prolotherapy is considered investigational as a treatment of musculoskeletal pain.**

### Coding

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
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<td><strong>CPT</strong></td>
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<tr>
<td>20999</td>
<td>Unlisted procedure, musculoskeletal system, general</td>
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<tr>
<td><strong>HCPCS</strong></td>
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<td>M0076</td>
<td>Prolotherapy</td>
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</table>

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### Related Information

N/A

### Evidence Review

#### Description

Prolotherapy describes a procedure intended for healing and strengthening ligaments and tendons by injecting an agent that induces inflammation and stimulates endogenous repair mechanisms. Prolotherapy may also be referred to as proliferant injection, prolo, joint sclerotherapy, regenerative injection therapy, growth factor stimulation injection, or nonsurgical tendon, ligament, and joint reconstruction.
Background

The goal of prolotherapy is to promote tissue repair or growth by prompting release of growth factors, such as cytokines, or by increasing the effectiveness of existing circulating growth factors due to injection of an irritant solution. The mechanism of action is not well-understood but may involve local irritation and/or cell lysis. Agents used with prolotherapy have included zinc sulfate, psyllium seed oil, combinations of dextrose, glycerin, and phenol, or dextrose alone, often combined with a local anesthetic. Polidocanol and sodium morrhuate, vascular sclerosants, have also been used to sclerose areas of high intratendinous blood flow associated with tendinopathies. Prolotherapy typically involves multiple injections per session conducted over a series of treatment sessions.

A similar treatment approach involves the injection of autologous platelet-rich plasma, which contains a high concentration of platelet-derived growth factors. Treatment of musculoskeletal pain conditions (eg, tendinopathies) with PRP is discussed in a separate policy (see Related Policies).

Summary of Evidence

For individuals who have musculoskeletal pain (eg, chronic neck, back pain), osteoarthritic pain, or tendinopathies of the upper or lower limbs includes, the evidence includes small randomized trials with inconsistent results. Relevant outcomes are symptoms, functional outcomes, and quality of life. The strongest evidence evaluates the use of prolotherapy for the treatment of osteoarthritis, but the clinical significance of the therapeutic results is uncertain. The evidence is insufficient to determine the effects of the technology on health outcomes.

Ongoing and Unpublished Clinical Trials

Some trials that might influence this policy are listed in Table 1.
Table 1. Summary of Key Trials

<table>
<thead>
<tr>
<th>NCT No.</th>
<th>Trial Name</th>
<th>Planned Enrollment</th>
<th>Completion Date</th>
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<tr>
<td>Ongoing</td>
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<tr>
<td>NCT01897259</td>
<td>Comparison of Conservative Methods for the Treatment of Lateral Epicondylitis: A Randomized, Prospective Study</td>
<td>200</td>
<td>Jun 2017 (ongoing)</td>
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<tr>
<td>NCT01934868</td>
<td>A Comparison of the Long Term Outcomes of Prolotherapy Versus Interlaminar Epidural Steroid Injections (ESI) for Lumbar Pain Radiating to the Leg</td>
<td>160</td>
<td>Dec 2017</td>
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<tr>
<td>Unpublished</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCT01402011</td>
<td>Prolotherapy in the Treatment of Rotator Cuff Tendinopathy, a Randomized Double-blind Placebo-controlled Study</td>
<td>72</td>
<td>Jun 2013 (completed)</td>
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<tr>
<td>NCT01617356</td>
<td>Treatment of Temporomandibular Dysfunction With Hypertonic Dextrose Injection: A Randomized Clinical Trial Efficacy</td>
<td>42</td>
<td>Dec 2016 (unknown)</td>
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</table>

NCT: national clinical trial

Practice Guidelines and Position Statements

*American Association of Orthopaedic Medicine*

The American Association of Orthopedic Medicine currently has a recommendation posted online for the use of prolotherapy for back pain. The Association has indicated that “…prolotherapy should be considered a valid treatment option in a selected group of chronic low back pain patients.”

Medicare National Coverage

The Coverage Issues Manual #35-13 states that prolotherapy, joint sclerotherapy, and ligamentous injections with sclerosing agents are not covered, noting that the medical effectiveness of these therapies has not been verified by scientifically controlled studies. In 1999, on request for reconsideration of coverage of prolotherapy for treatment for chronic low back
pain, Medicare retained its noncoverage decision for prolotherapy, citing a lack of scientific evidence on which to base a decision.\textsuperscript{23}

**Regulatory Status**

Sclerosing agents have been approved by the U.S. Food and Drug Administration for use in treating spider and varicose veins. These sclerosing agents include Asclera® (polidocanol), Varithena® (an injectable polidocanol foam), Sotradecol® (sodium tetradecyl sulfate), Ethamolin® (ethanolamine oleate), and Scleromate® (sodium morrhuate). These agents are not currently approved as joint and ligamentous sclerosing agents.

**References**


**History**

<table>
<thead>
<tr>
<th>Date</th>
<th>Comments</th>
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<tbody>
<tr>
<td>02/01/00</td>
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<td>12/11/01</td>
<td>Replace Policy - Policy reviewed; policy statement unchanged. New references included.</td>
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<td>08/12/03</td>
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<td>07/11/06</td>
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<td>10/09/07</td>
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<td>Codes Updated - CPT 0232T added to the policy; no other updates.</td>
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<td>10/12/10</td>
<td>Replace Policy - Policy updated with literature review through June 2010; the policy statement remains unchanged. Code 0232T has been removed.</td>
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<td>10/11/11</td>
<td>Replace Policy – Policy updated with literature review through May 2011; reference 17 added; policy statement unchanged.</td>
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<tr>
<td>08/24/12</td>
<td>Update Coding Section – ICD-10 codes are now effective 10/01/2014.</td>
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<td>Replace policy. Policy updated with literature review through June 2012; reference added; policy statement unchanged.</td>
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<td>08/15/13</td>
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<td>01/21/14</td>
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<td>11/20/14</td>
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<td>Annual Review. Policy updated with literature review through June 30, 2015; references 12 and 15 added; policy statement unchanged. ICD-9 and ICD-10 diagnosis and procedure codes removed; these are for informational purposes only. CPT codes 20550-20553, 27096, 64490-64495 removed due to lack of specificity or application.</td>
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<td>through September 14, 2017; reference 22 added. Policy statement unchanged. Removed CPT code 0232T.</td>
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**Scope**: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy does not apply to Medicare Advantage.
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  - Qualified interpreters
  - Information written in other languages
  
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Toll free 855-332-4535, Fax 425-918-5592. TTY 800-842-5357
Email AppealsDepartmentInquiries@Premera.com

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https://ocrportal.hhs.gov/ocr/portal/lobby.jsf, or by mail or phone at:
U.S. Department of Health and Human Services
200 Independence Avenue SW, Room 509F, HHH Building
Washington, D.C. 20201, 1-800-368-1019, 800-537-7697 (TDD)
Complaint forms are available at

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This Notice has Important Information. This notice may have important information about your application or coverage through Premera Blue Cross. There may be key dates in this notice. You may need to take action by certain deadlines to keep your health coverage or help with costs. You have the right to get this information and help in your language at no cost.

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Daytoy a Pakdaar ket naglaon iti Napateg nga Impomran. Daytoy a pakdaar mabalin nga adda ket naglaon iti napateg nga impomran maipanggep iti aplikasyonno wenno coverage babena iti Premera Blue Cross. Daytoy ket mabalin dagiti importante a petsa iti daytoy a pakdaar. Mabalin nga adda rumbeng nga aramidenyo nga addang sakbay dagiti partikular a naiituding nga adaw tAPO tapno mapagtalainedyo ti coverage ti salun-atyo wenno tulong kadagiti gastos. Adda karbenganyo a mangala iti daytoy nga impomran ken tulong ti bukodyo a pagasaaa nga awan ti bayadanoy. Tumawag ti numero nga 800-722-1471 (TTY: 800-842-5357).

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Română (Romanian):

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