

## Corporate Medical Policy

### Chelation Therapy

**File Name:** chelation\_therapy  
**Origination:** 12/1995  
**Last Review:** 3/2005

**Active policy, no longer scheduled for routine literature review.**

#### Description of Procedure or Service

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Chelation therapy is the use of chelating agents, such as edetate calcium disodium (EDTA), dimercaprol, deferoxamine, penicillamine, and succimer, to rid the body of toxic levels of iron, lead, or other heavy metals. After the chelating agent is introduced into the body, it takes the metal from the organs or tissues and binds it firmly to a new compound that can be eliminated from the body. In cases of severe poisoning, a process of [parenteral infusion](#) of the chelating agents (for example: EDTA, dimercaprol, or deferoxamine) is used to speed up the elimination process. Chelating agents may be given by mouth or by [parenteral infusion](#).

#### Policy

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**BCBSNC will provide coverage for Chelation Therapy when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.**

#### Benefits Application

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Please refer to Certificate for availability of benefit. See Professional Services.

#### When Chelation Therapy is covered

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[Parenteral](#) chelation therapy may be considered medically necessary for the treatment of documented systemic iron overload (hemochromatosis), lead poisoning, or other heavy metal toxicity as defined below:

- ◆ **Hemochromatosis:** Clinical symptoms of chronic iron toxicity should correlate with an elevated serum ferritin. [Parenteral](#) chelation therapy is not medically necessary in [genetic](#) or [hereditary](#) hemochromatosis. [Subcutaneous](#) infusion of desferoxamine via a portable pump may be considered medically necessary for acquired hemochromatosis complicating a chronic hemolytic anemia such as thalassemia or sideroblastic anemia or when hypoproteinemia precludes [phlebotomy](#) as treatment.
- ◆ **Acute iron poisoning:** [Parenteral](#) deferoxamine is medically necessary in patients with serum iron level greater than 50umol/L (300ug/dL) or in whom a deferoxamine challenge test is positive.

## Policy: Chelation Therapy

- ◆ **Lead:** [parenteral](#) chelation therapy may meet medical necessity requirements in adults with blood lead levels greater than 1.7umol/L (35ug/dL) or in children with levels greater than 25 ug/dL. [Parenteral](#) EDTA and/or dimercaprol may be allowed until blood lead levels decrease (usually one to two 5-day courses of therapy).
- ◆ **Other heavy metals:** arsenic, cadmium, gold, mercury, and thallium poisoning are generally suspected based upon a positive urine screen for heavy metals in a symptomatic individual. Toxic levels should be confirmed with blood levels where appropriate. [Parenteral](#) chelation agents are not always appropriate and should be reviewed for approved indications against the specific heavy metal identified.
- ◆ [Parenteral](#) chelation therapy may also be medically necessary for the following indications:
  - Control of [ventricular arrhythmias](#) or heart block associated with [digitalis](#) toxicity
  - Emergency treatment of hypercalcemia
  - Wilson's Disease (Hepatolenticular degeneration)

### When Chelation Therapy is not covered

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- ◆ Chelation therapy is considered investigational and non-covered when used to treat the following conditions:
  - Peripheral arterial occlusive disease
  - Heavy metal toxicity or iron or lead poisoning where toxic levels are not documented by standard testing methods
  - Multiple sclerosis
  - Arthritis
  - Hypoglycemia
  - Diabetes
  - Arteriosclerosis
  - Other indications not listed

### Policy Guidelines

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In general, [parenteral](#) chelation therapy is short term. Home [parenteral](#) chelation therapy may be allowed in sub-acute situations; for example, thalassemia, where therapy is likely to be lengthy and hospitalization is not required.

### Billing/Coding/Physician Documentation Information

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*Applicable Codes: J0470, J0600, J3520, S9355, M0300*

*Documentation Requirements:*

*Laboratory results must be provided by a certified lab.*

## Policy: Chelation Therapy

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

### Policy Key Words

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Key Words: Chelation, Chelation Therapy, Iron, Lead, Heavy Metals, Toxin, Toxic.

### Medical Term Definitions

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#### **Digitalis**

a drug that strengthens the contraction of the heart muscle, slows the heart rate and promotes the elimination of fluid from body tissues. It is often used to treat congestive heart failure, some kinds of congenital heart defects, and also to treat certain arrhythmias. It is derived from the foxglove plant.

#### **Genetic**

hereditary; transferred through the genes from parent to child.

#### **Hereditary**

the genetic transfer of a specific trait from parent to offspring.

#### **Parenteral**

not through the digestive tract but by injection through some other route (Example: intramuscular, intravenous or subcutaneous).

#### **Parenteral infusion**

process of injecting a solution into the vein.

#### **Phlebotomy**

needle puncture of a vein to withdraw blood.

#### **Subcutaneous**

under the skin.

#### **Ventricular arrhythmias**

a cardiac arrhythmia that originates within the ventricles (chambers) of the heart.

### Scientific Background and Reference Sources

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BCBSA Medical Policy Reference Manual - 12/95

Circulation, 1997;96(5):1031-3

Harrison's Principles of Internal Medicine, Isselbacher, et.al., McGraw Hill, 13th ed. 1145-2496

Nelson's Textbook of Pediatrics, Behrman, et. al., Saunders, 15th ed.

DeSwarte-Wallace J, Groncy PK, Finkelstein JZ, Iron Chelation with deferoxamine: comparing the results

## Policy: Chelation Therapy

of a critical pathway to a national survey. *J Pediatr Hematol Oncol* 1999 Mar-Apr;21(2):136-41

Medical Policy Advisory Group - 10/99

Medical Policy Advisory Group - 3/1/2001

Specialty Matched Consultant Advisory Panel - 9/2002

BCBSA Medical Policy Reference Manual, 8.01.02, 7/12/02

Specialty Matched Consultant Advisory Panel - 4/2003

BCBSA Medical Policy Reference Manual [Electronic Version]. 8.01.02, 10/9/03.

### Policy Implementation/Update Information

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- 12/97 Revised: Previous policy archived. See M0300.ARC. Additional information added to Policy for understanding of therapy.
- 8/99 Reformatted, Medical Term Definitions added.
- 10/99 Medical Policy Advisory Group - Added that statement that laboratory results must be provided by a certified lab
- 10/00 System coding changes.
- 3/01 Medical Policy Advisory Group review. Corrected typos. Medical Term Definitions clarified. Approve. J codes added to coding section. System changes.
- 4/02 Revised the description section and added, "Chelating agents may be given by mouth or by parenteral infusion". Revised bullet number 2 under when it is not covered to include, "by standard testing methods".
- 10/02 Specialty Matched Consultant Advisory Panel review. No change in policy.
- 5/03 Specialty Matched Consultant Advisory Panel review. No change in policy. Reaffirm.
- 4/7/05 Specialty Matched Consultant Advisory Panel [MPAG] review on 3/10/2005. No changes made in policy criteria. Reference added. Policy status changed to: "Active policy, no longer scheduled for routine literature review."
- 6/22/10 Policy Number(s) removed (amw)

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Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.