UnitedHealthcare Community Plan

Chelation Therapy for Non-Overload Conditions

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Instructions for Use

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Application

This Medical Policy does not apply to the states listed below; refer to the state-specific policy/guideline, if noted:

State	Policy/Guideline
Indiana	Chelation Therapy for Non-Overload Conditions (for Indiana Only)
Kentucky	Chelation Therapy for Non-Overload Conditions (for Kentucky Only)
Louisiana	Chelation Therapy for Non-Overload Conditions (for Louisiana Only)
Mississippi	Chelation Therapy for Non-Overload Conditions (for Mississippi Only)
New Jersey	Chelation Therapy for Non-Overload Conditions (for New Jersey Only)
Ohio	Chelation Therapy for Non-Overload Conditions (for Ohio Only)
Pennsylvania	Chelation Therapy for Non-Overload Conditions (for Pennsylvania Only)
Tennessee	Chelation Therapy for Non-Overload Conditions (for Tennessee Only)

Coverage Rationale

Chelation for heavy metal toxicity and overload conditions (e.g., iron, copper, lead, aluminum) is proven and medically necessary and not addressed in this policy.

The following are unproven and not medically necessary due to insufficient evidence of efficacy:
- Chelation therapy for treating any chronic, progressive diseases associated with non-overload conditions
- Chelation therapy for treating mercury "toxicity" from dental amalgam fillings

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

HCPCS Code	Description
J0470	Injection, dimercaprol, per 100 mg
J0600	Injection, edetate calcium disodium, up to 1,000 mg
J0895	Injection, deferoxamine mesylate, 500 mg
J3490	Unclassified drugs
J3520	Edetate disodium, per 150 mg
J8499	Prescription drug, oral, nonchemotherapeutic, NOS
M0300	IV chelation therapy (chemical endarterectomy)
S9355	Home infusion therapy, chelation therapy; administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem

Description of Services

Chelation therapy can provide substantial clinical benefit for conditions where heavy metal overload has been accurately diagnosed. The diagnostic workup must consider the individual's history, an appropriate choice of testing methods, and the use of accurate and specific reference values. Chelation therapy is an established treatment for removing metal toxins from the body. This involves administering naturally occurring or chemically designed molecules to bind and excrete a specific toxin in the body. The medication, route, method, and site of administration of the chelating agent vary depending on the agent used, toxicity level, and other clinical indications. Heavy metal toxicity, most often treated with chelation therapy, includes that caused by iron, copper, lead, aluminum, and mercury.

Non-Overload Conditions

Chelation therapy has been proposed as a treatment for various non-overload conditions where acute or chronic heavy metal toxicity has not been demonstrated and in which the removal of heavy metal ions is hypothesized to reduce oxidative damage caused by the production of hydroxyl radicals. However, the possible mechanism of chelators as therapeutic agents for non-overload conditions has yet to be fully understood. Chelation has been investigated as a treatment of numerous non-overload conditions including, but not limited to, cardiovascular disease, rheumatoid arthritis (RA), cancer, and diabetes.

Mercury "Toxicity" from Dental Amalgam Fillings

Chelation therapy has been proposed to treat metal toxicity from dental amalgam fillings, but it has not been shown that mercury amalgams cause harm to individuals with dental fillings, except in rare cases of allergy.

Clinical Evidence

Non-Overload Conditions

Well-designed, published and peer-reviewed studies do not support chelation treatment for chronic, progressive diseases such as cardiovascular disease, atherosclerosis, diabetes, cancer, Alzheimer's disease, autism spectrum disorder, or Parkinson's disease. No quality peer-reviewed studies were identified regarding chelation therapy for the treatment of rheumatoid arthritis, apoplectic coma, chronic fatigue syndrome, chronic renal insufficiency, defective hearing, diabetic ulcer, cholelithiasis, gout, erectile dysfunction, multiple sclerosis, osteoarthritis, osteoporosis, Raynaud's disease, renal calculus, schizophrenia, scleroderma, snake venom poisoning, varicose veins, or vision disorders. There is insufficient evidence that chelation therapy is safe and effective for the removal of undesirable metabolites or toxins nor does it positively impact clinical outcomes for different disease states.

Alzheimer's Disease (AD)

Increased levels of aluminum have been discovered in several brain regions of individuals with AD. Epidemiological studies have linked the concentration of aluminum in drinking water and increased disease occurrence. Some scientists have suggested that chelation therapy may promote beneficial results for individuals with AD by inhibiting the deposition of aluminum in the brain and/or preventing iron from catalyzing the formation of toxic hydroxyl radicals. Aluminum chelators may also reactivate aluminized metalloenzyme complexes for individuals with AD and permit aluminum redistribution in the brain.

Sampson et al. conducted a Cochrane systematic review to evaluate the efficacy of metal protein attenuating compounds (MPACs) for treating cognitive impairment due to AD. The primary outcome measure was cognitive function (measured by psychometric tests). Two MPAC trials were identified. One trial compared clioquinol (PBT1) with a placebo in 36 individuals, with 32 had sufficient data per protocol analysis. There was no statistically significant difference in cognition (as measured on the AD Assessment Scale-Cognition (ADAS-Cog) between the active treatment and placebo groups at 36 weeks, and there was no significant impact on non-cognitive symptoms or clinical global impression. In the second trial, a successor compound, PBT2, was compared with a placebo in 78 participants with mild AD. There was no significant difference in the Neuropsychological Test Battery (NTB) composite or memory between placebo and PBT2 at week 12. However, two executive function component tests of the NTB showed significant improvement over the placebo in the PBT2 250 mg group from baseline to week 12. There was no significant effect on cognition on Mini-Mental State Examination (MMSE) or ADAS-Cog scales. PBT2 did have a favorable safety profile. The authors concluded that evidence is absent as to whether clioquinol (PBT1) is safe or has any positive clinical benefit for individuals with AD and cited that further development of PBT1 has been abandoned. The second trial of PBT2 was more rigorously conducted and appeared to be safe and well tolerated for individuals with mild AD after 12 weeks. Larger trials are now required to demonstrate cognitive efficacy (2014).

Several studies have suggested improving cognitive function or biomarkers for individuals treated with clioquinol or deferoxamine (Crapper Mclachlan, 1991; Regland, 2001; Ritchie, 2003). However, these studies were small, only two were placebo-controlled, and none were double-blind, and therefore no conclusions regarding the clinical efficacy of chelation therapy for AD can be made based on these studies.

Autism Spectrum Disorder (ASD)

A Cochrane systematic evidence review found no clinical trial evidence to suggest that pharmaceutical chelation is an effective intervention for ASD. One study was found, which was conducted in two phases. During Phase 1, 77 children with ASD were randomly assigned to receive seven days of glutathione lotion or placebo lotion, followed by three days of oral dimercaptosuccinic acid (DMSA). A total of 49 children found to be high excreters of heavy metals during Phase 1 continued to Phase 2 and received three days of oral DMSA or a placebo followed by 11 days off, with the cycle repeated up to six times. The second phase assessed the effectiveness of multiple doses of oral DMSA compared with placebo in children who were high excreters of heavy metals and received a 3-day course of oral DMSA. Overall, no evidence suggests that multiple rounds of oral DMSA influenced ASD symptoms. The authors concluded that given prior reports of serious adverse events such as hypocalcemia, renal impairment, and reported death, the risks of using chelation for ASD currently outweigh the proven benefits. In their opinion, evidence that supports a causal link between heavy metals and autism must be identified, and methods that ensure the safety of participants are imperative before further trials are conducted (James et al., 2015).

Cardiovascular Disease (CVD)

Chelation therapy has been proposed to treat coronary artery disease (CAD), based partly on the hypothesis that chelation could remove atherosclerotic calcium deposits or provide an antioxidant benefit.

In 2022, Ravalli et al. systematically reviewed literature related to chelation therapy for individuals with CVD to examine the effect of repeated ethylene diamine tetra-acetic acid (EDTA) on clinical outcomes. Of the 24 studies investigated, predetermined outcomes such as mortality, disease severity, plasma biomarkers of disease chronicity, and quality of life for individuals with preexistent CVD who utilized EDTA chelation treatments were included. In total, 17 studies, including one randomized clinical trial (RCT), found improvement in individuals' outcomes following EDTA treatment. The most significant improvement was uncovered in the studies that included individuals with a high prevalence of diabetes and/or severe occlusive artery disease. The meta-analysis conducted demonstrated a gain of 0.08 (95% CI, 0.06-0.09) from baseline from four studies reporting ankle-brachial index. Limitations in the available studies included the small number of RCTs, lack of reported clinical outcomes in several studies, differing infusion regimens, small sample sizes, and limited follow-up data. The authors concluded that this present systematic review of past studies suggests a signal of benefit for individuals with atherosclerotic disease, particularly those with diabetes. Future clinical research on EDTA chelation for individuals with diabetes and PAD must include a mechanical component that could clarify if chelation therapy signifies a benefit for this population subgroup, contributing to precision environmental medicine [Lamas et al. (2013) and Knudtson et al. (2002) are included in this systematic review].

An updated Cochrane systematic review of evidence published initially in 2002, was completed by Villarruz-Sulit et al. (2020) to assess the effects of EDTA chelation therapy versus placebo or no treatment on clinical outcomes among people with atherosclerotic cardiovascular disease (ASCVD). The review included five RCTs of EDTA chelation therapy versus placebo or no treatment, with 1,993 randomized participants. The number of participants in each study varied widely (from 10 to 1,708 participants), but all studies compared EDTA chelation to a placebo. The risk of bias for the included studies was generally moderate to low, but one had a high risk of bias because the study investigators broke their randomization code halfway through the study and rolled the placebo participants over to active treatment. The main outcome measures included all-cause or cause-specific mortality, non-fatal cardiovascular events, direct or indirect measurement of disease severity, and subjective measures of improvement or adverse events. Two studies with participants with CAD reported no evidence of a significant difference in all-cause mortality between chelation therapy and placebo [risk ratio (RR) 0.97, 95% CI 0.73 to 1.28; 1,792 participants; low certainty]. One study with participants with CAD reported no evidence of a significant difference in coronary heart disease deaths between chelation therapy and placebo (RR 1.02, 95% CI 0.70 to 1.48; 1,708 participants; very low certainty). Two studies with participants with CAD reported no evidence of a significant difference in MI (RR 0.81, 95% CI 0.57 to 1.14; 1,792 participants; moderate certainty), angina (RR 0.95, 95% CI 0.55 to 1.67; 1,792 participants; very low certainty), or coronary revascularization (RR 0.46, 95% CI 0.07 to 3.25; 1,792 participants). Two studies [one of the participants with CAD and one of the participants with peripheral vascular disease (PVD) reported no evidence of a significant difference in stroke (RR 0.88, 95% CI 0.40 to 1.92; 1,867 participants; low certainty)]. Ankle-brachial pressure index (ABPI, also known as ankle brachial index) was measured in three studies, all including participants with PVD; two studies found no evidence of a significant difference in the treatment groups after three months of treatment [mean difference (MD) 0.02, 95% CI-0.03 to 0.06; 181 participants; low-certainty]. A third study reported an improvement in ABPI in the EDTA chelation group, but this study was at elevated risk of bias. Meta-analysis of maximum and pain-free walking distances three months after treatment included participants with PVD and showed no evidence of a significant difference between the treatment groups (MD-31.46, 95% CI-87.63 to 24.71; 165 participants; two studies; low-certainty). Quality of life outcomes was reported by two studies that included participants with CA; however, the authors were unable to pool the data due to different methods of reporting and varied criteria. No major differences between the treatment groups were reported – none of the included studies reported on vascular deaths. Overall, there was no evidence of major or minor adverse events associated with EDTA chelation treatment. The authors concluded that there is currently insufficient evidence to determine the effectiveness or ineffectiveness of chelation therapy in improving the clinical outcomes of people with ASCVD. More high-quality, RCTs are needed to assess chelation therapy's effects on longevity and quality of life among people with ASCVD.

Analysis of the data from the TACT study reported that, in stable individuals with a history of MI, the use of an intravenous chelation regimen with Edetate calcium disodium (EDTA) modestly reduced the risk of a variety of adverse cardiovascular outcomes compared to placebo. The authors reported that the primary endpoint occurred in 222 (26%) of the chelation group and 261 (30%) of the placebo group indicating that the primary outcome barely reached the pre-specified statistical significance level, and therefore the role of chance in these findings was unclear. None of the findings on the secondary outcomes were statistically significant. Therefore, independent replication of the findings would be necessary to consider this treatment as proven. The authors stated that while these results should guide further research, there still is insufficient evidence to support the routine use of chelation therapy fore individuals post-MI (Lamas et al., 2013).

The Cochrane review above included a study by Lamas et al. (2012) that described a pivotal clinical trial, the TACT, in detail. The use of chelation therapy in lieu of established therapies, the lack of adequate prior research to verify its effectiveness and clinical utility, and the overall impact of CAD prompted the National Center for Complementary and Alternative Medicine (NCCAM) and the National Heart, Lung, and Blood Institute (NHLBI) to sponsor this large-scale clinical study. The 5-year study was a multicenter, double-blind, randomized efficacy trial from 2002 to 2011, to determine whether EDTA chelation therapy and high-dose oral vitamin and mineral therapy offered clinical, quality of life, and economic benefits for individuals with a prior myocardial infarction. The participants (n = 1,708) were randomized to receive 40 infusions of a 500-mL chelation solution or a placebo infusion, with a second randomization to an oral vitamin and mineral regimen or an oral placebo. Following the infusion phase of the trial, participants were contacted quarterly by telephone, had annual clinic visits, and were seen at the end of the trial or at the 5-year follow-up, whichever occurred first.

A study in the updated Cochrane review by Escolar et al. (2014) used results of the TACT clinical trial to perform an initial subgroup analysis which showed a greater effect of EDTA treatment among participants with a self-reported history of diabetes. Further examination of the data for individuals with diabetes demonstrated a 41% overall reduction in the risk of any cardiovascular event; a 40% reduction in risk of cardiovascular mortality, non-fatal stroke, or non-fatal MI; a 52% reduction in recurrent heart attacks; and a 43% reduction in death from any cause. In contrast, EDTA treatment was no significant benefit in the subgroup of 1,045 participants who did not have diabetes. The authors note that results of this analysis support the initiation of clinical trials for individuals with diabetes and vascular disease to replicate these findings, and to define the mechanisms of benefit. However, it was also concluded that there is not enough evidence to support the routine use of chelation therapy for this.

In additional analyses of the TACT study in 2020, Lewis et al. examined the effect of edetate disodium chelation therapy as a function of MI location and diabetes. Chelation therapy was associated with a lower risk of the primary endpoint for 674 individuals post-MI (HR 0.63, 95% CI 0.47–0.86, $p = 0.003$) for individuals with anterior MI. For post-non-anterior MI individuals totaling 1,034 participants, chelation therapy was not associated with a lower risk of the primary endpoints (HR 0.96, 95% CI 0.77–1.20, $p = 0.702$) (p-for-interaction = 0.032). However, the point estimates of each part of the primary endpoint favored chelation therapy. The differing treatment effect for individuals with post-anterior vs. non-anterior MI was consistent among those with or without diabetes and remained significant after adjusting other prognostic variables ($p < 0.01$). There were several limitations to this analysis. First, the individuals with anterior MI had a lower overall event rate than non-anterior MI and no difference in the distribution of congestive heart failure or revascularization at baseline. The anterior MI cohort also included significant differences compared to the non-anterior MI cohort, including higher HDL concentrations, lower blood pressure, and lower rates of former smokers, which may have contributed to the results. There are no quantities of metals or coronary artery calcium at baseline or throughout follow-up to allow mechanistic assessments of the influence of edetate disodium infusions and for the association of the degree of responsiveness to results reached. The authors concluded that Edetate disodium-based infusions, compared to placebo, independently reduced the risk of adverse cardiovascular events among stable individuals with prior anterior MI. However, the authors state that the current results must be considered exploratory and hypothesis-generating. These post hoc findings should be taken with cautions and studies specific to individuals with anterior MI should be conducted to confirm these findings.

The updated Cochrane review (above, by Villarruz-Sulit) also included a RCT by Knudtson et al. (2002) to determine if the chelating agent, EDTA protocols have a favorable impact on exercise ischemia threshold and quality of life measures for individuals with stable ischemic heart disease. The study included 84 participants who were randomized between January 1996 and January 2000. Of the 84 individuals randomized, 78 completed treatments, the final treadmill test, and the final quality of life assessments (39 in each group). Four individuals randomized to placebo and two individuals randomized to chelation were unable to complete the treatment phase. Participants were randomly assigned to receive infusion with either weight-adjusted (40 mg/kg) EDTA chelation therapy ($n = 41$) or placebo ($n = 43$) for 3 hours per treatment, twice weekly for 15 weeks, and once per month for an added three months. Participants in both groups took oral multivitamin therapy as well. Thirty-nine individuals in each group completed the 27-week protocol. One participant undergoing chelation had therapy discontinued for a transient rise in serum creatinine. The mean (SD) baseline exercise time to ischemia was 572 (172) and 589 (176) seconds in the placebo and chelation groups, respectively. The corresponding mean changes in time to ischemia at 27 weeks were 54 seconds [95% confidence interval (CI), 23-84 seconds; $p < .001$] and 63 seconds (95% CI, 29-95 seconds; $p < .001$), for a difference of 9 seconds (95% CI, −36 to 53 seconds; $p = .69$). Exercise ability and quality of life scores improved by similar degrees in both groups. The authors concluded that based on exercise time to ischemia, exercise ability, and quality of life measurements, there is no evidence to support a beneficial effect of chelation therapy for individuals with ischemic heart disease, stable angina, and a positive treadmill test for ischemia.

Parkinson's Disease (PD)

Martin-Bastida et al. (2017) performed a randomized, double-blind, placebo-controlled trial to investigate whether iron chelator, deferiprone, is well tolerated and able to chelate iron from various brain regions and improve PD symptomology. The study included 22 participants (12 males and 10 females, aged 50-75 years) with early-stage PD, a disease duration of fewer than five years. The individuals with PD were recruited between April 4, 2012, and March 27, 2013, and randomly selected to receive a placebo or 20 or 30 mg/kg/day deferiprone (80 mg/mL deferiprone solution or excipient matched placebo provided by ApoPharma Inc., Toronto, ON, Canada) which was divided into two daily oral doses, morning and evening, and administered for six months. Participants were evaluated for PD severity, cognitive function, depression rating, and quality of life. Iron concentrations were assessed in the substantia nigra (SNc), dentate and caudate nucleus, red nucleus, putamen, and globus pallidus by T2 MRI at baseline and after three and six months of treatment. Deferiprone therapy was well tolerated and was associated with a reduced dentate and caudate nucleus iron content compared to placebo. Reductions in the iron content of the SNc occurred in only three individuals, with no changes being detected in the putamen or globus pallidus. Although 30 mg/kg deferiprone-treated individuals showed a trend for improvement in Movement Disorders Society – Unified Parkinson's Disease Rating Scale (MDS-UPDRS) scores and quality of life, this did not reach significance. Cognitive function and mood were not adversely affected by deferiprone therapy. The authors concluded that short-term deferiprone therapy for individuals with PD is safe and associated with decreased iron-specific brain regions. A small sample size renders these non-statistically significant findings largely inconclusive. The findings of this study need to be confirmed by more extensive well-designed studies.

Clinical Practice Guidelines

American Academy of Family Physicians (AAFP)

In its clinical policy on chelation therapy, the AAFP states that it is appropriate for cases of heavy metal intoxication when diagnosed using validated testing in appropriate biological samples. The use of chelation therapy for other problems remains investigational and should not be recommended (2018).

American Academy of Pediatrics (AAP) Council on Environmental Health

As part of the "Choosing Wisely" initiative, in 2021, the AAP released five things physicians, and patients should question regarding environmental health and autism. The AAP Council on Environmental Health recommends against ordering 'chelation challenge' urinary analyses for children with suspected lead poisoning. The 'chelation challenge' was formerly used to assess whether a child had a significant body burden of lead, or "lead poisoning," and whether formal chelation would result in significant lead clearance. Evidence suggests that the chelation challenge has no better prognostic value than the standard blood lead level. Further, there is some evidence that the chelation challenge may be potentially dangerous. In summary, the chelation challenge has no clinical utility in treating childhood lead poisoning today (Mackara., 2021).

American College of Cardiology (ACC)/American Heart Association Task Force on Practice Guidelines (AHA)/American Association for Thoracic Surgery (AATS)/Preventative Cardiovascular Nurses Association (PCNA)/Society for Cardiovascular Angiography and Interventions (SCAI)/Society of Thoracic Surgeons (STS)

The ACC/AHA/AATS/PCNA/SCAI/STS concluded that although disodium EDTA is approved by the U.S. Food and Drug Administration for specific indications, such as iron overload and lead poisoning, it is not approved for use in preventing or treating cardiovascular disease. Accordingly, the group finds that the usefulness of chelation therapy in cardiac disease is highly questionable (Fihn et al., 2014).

American College of Medical Toxicology (ACMT)

A position statement released by the American College of Medical Toxicology on September 26, 2013, concluded that chelation is not recommended for any condition other than documented metal intoxication, which has been diagnosed using validated tests in appropriate biological samples. Chelation does not improve objective outcomes in autism, CVD, or neurodegenerative conditions like Alzheimer's. Chelating drugs may have significant side effects, including dehydration, hypocalcemia, kidney injury, liver enzyme elevations, hypotension, allergic reactions, and essential mineral deficiencies, even when used for appropriately diagnosed metal intoxication. Inappropriate chelation, which may cost hundreds to thousands of dollars, risks these harms, as well as neurodevelopmental toxicity, teratogenicity, and death (released 2013 and 2015; last reviewed 2021).

American College of Physicians (ACP)

The American College of Physicians, American College of Cardiology Foundation, American Heart Association, and three other medical associations published joint clinical practice guidelines on managing stable ischemic heart disease (IHD). The guidelines recommended that "chelation therapy should not be used to improve symptoms or reduce cardiovascular risk for individuals with stable ischemic heart disease" (Qaseem et al., 2012).

In 2004, the American College of Physician's clinical practice guidelines said that chelation "should not be used to prevent MI or death or to reduce symptoms for individuals with symptomatic chronic stable angina." (Snow et al. 2004).

Canadian Cardiovascular Society

The evidence-based, consensus guidelines (2014) from the Canadian Cardiovascular Society included a conditional recommendation (based on moderate-quality evidence) that chelation therapy should not be used to attempt to improve angina or exercise tolerance for individuals with stable ischemic heart disease (IHD) (Mancini et al., 2014).

National Institute for Health and Care Excellence (NICE)

A NICE guideline on autism does not recommend using chelation to manage core symptoms of autism in adults (2012; updated 2021).

Mercury "Toxicity" from Dental Amalgam Fillings

Dental amalgams have been investigated as a cause of increased blood levels of mercury, potentially associated with several diseases and disorders. While no studies were identified that addressed chelation directly therapy for mercury "toxicity" from amalgam fillings, high-quality indirect evidence supports the lack of such toxicity. RCTs have concluded that mercury amalgams used in dental restorations cause no harm (Shenker et al., 2008; Bellinger et al., 2006; DeRouen et al., 2006).

Golding et al. (2015) evaluated the extent to which dental amalgam (DA) may contribute to total blood mercury (TBHg) levels of pregnant women in a single geographic region in the UK. The authors reviewed the laboratory assay results for total mercury levels in whole blood samples of 4,484 pregnant women and concluded that the number of DA fillings is responsible for at least 6.47% of the participants' TBHg level. For perspective, in an earlier publication, the authors noted that 8.75% of the TBHg level was shown to be attributable to seafood consumption in the same study population. The number of amalgams in the participants' mouths at the start of pregnancy accounted for most of the variance in dental variability. The authors noted that the measures of DA exposure were at risk of recall bias as they were dependent on the responses to a retrospective questionnaire completed two years after the study child's delivery. The questions asked in the questionnaire regarding dental care received before and during the pregnancies were inserted in the middle of the questionnaire without reference to any outcome to minimize bias. Another disadvantage to the study noted by the authors was that the timing of the blood draw in relation to the timing of any dental work was not known. The authors concluded that DA contributes a comparable amount of variance in TBHg to seafood consumption in this population and that there is no evidence to date that fetal exposures to mercury from maternal DAs cause adverse effects on a developing child.

U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Chelation therapy, using FDA-approved chelating agents, is approved when used for metal poisoning or iron overload treatment. Use is limited to FDA-approved indications for each chelation agent, as referenced in a generally recognized drug compendium (e.g., American Hospital Formulary Services Drug Information® or DrugDex® System). Additional information is available at: http://www.accessdata.fda.gov/scripts/Cder/ob/default.cfm. (Accessed February 17, 2023)

The FDA issued updated recommendations concerning dental amalgam and potential risks to certain high-risk individuals that may be associated with mercury-containing fillings. In 2020, the FDA released a statement saying that certain groups may be at risk for potential harmful health effects; the agency recommends that certain high-risk groups avoid getting dental amalgam when possible and appropriate. These groups that may be at a greater risk for potential harmful health effects include:

- Pregnant women and their developing fetuses
- Women who are planning to become pregnant
- Nursing women and their newborns and infants
- Children, especially those younger than six years of age
- People with pre-existing neurological diseases such as multiple sclerosis, Alzheimer's disease, or Parkinson's disease
- People with impaired kidney function; and
- People with known heightened sensitivity (allergy) to mercury or other components of dental amalgam

Additional information is available at: https://www.fda.gov/news-events/press-announcements/fda-issues-recommendations-certain-high-risk-groups-regarding-mercury-containing-dental-amalgam. (Accessed February 17, 2023)

In 2019 the FDA warned against several companies that have made improper claims about their products' intended use as a treatment or cure for autism or autism-related symptoms. The FDA states that FDA-approved chelating agents are approved for specific uses that do not include the treatment or cure of autism, such as the treatment of lead poisoning and iron overload and are available by prescription only. Additional information is available at: https://www.fda.gov/consumers/consumer-updates/be-aware-potentially-dangerous-products-and-therapies-claim-treat-autism. (Accessed February 17, 2023)

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Policy History/Revision Information

Date	Summary of Changes
09/01/2023	**Related Policies** • Added reference link to the Medical Policy titled *Apheresis* **Applicable Codes** • Added HCPCS code J3520 **Supporting Information** • Updated *Description of Services*, *Clinical Evidence*, *FDA*, and *References* sections to reflect the most current information • Archived previous policy version CS016.L

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This Medical Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage govern. Before using this policy, please check the federal, state or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

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