

Chelation Therapy to Improve Health

Next Steps

The nominator is interested in research about chelation therapy to improve many conditions including cardiovascular health, neurologic conditions, joint conditions, and skin appearance.

Due to limited program resources at this time, AHRQ will not further assess this topic. No further activity on this topic will be undertaken by the Effective Health Care (EHC) Program.

Topic Summary and Considerations

Topic Name and Number: Chelation Therapy to Improve Health

Date: 8/16/2017

Key question from the nomination:

What is the effectiveness of chelation therapy on health outcomes for:

- Cardiovascular health
- Neurologic conditions
- Joint conditions, such as osteoarthritis
- Skin appearance
- General organ function
- Chelation therapy is a treatment used for removing heavy metals from the blood, and used for heavy metal poisoning such as lead poisoning.
- Commonly an agent called ethylene diamine tetra-acetic acid (EDTA) is used to bind with the heavy metal and this is then excreted from the body through the kidneys. EDTA is approved by the FDA for specific reasons such as iron overload and lead poisoning.
- Chelation therapy has also been used to treat other conditions such as atherosclerosis. According to the ACC guidelines the usefulness of this therapy for reducing cardiovascular events was uncertain (1).
- Harms of chelation therapy include elevated blood pressure, headache, rash, low calcium, kidney failure and even death. In addition chelation could remove important minerals from the body.
- In 2016, the US Food and Drug Administration (FDA) advised consumers to be wary of over the counter chelation products marketed to prevent or treat disease. The FDA has not approved any chelation products for over the counter use (2).
- Due to limited program resources at this time, AHRQ will not further assess this topic.

References

1. Fihn SD BJ, Alexander KP, Bittl JA, Byrne JG, Fletcher BJ, Fonarow GC, Lange RA, Levine GN, Maddox TM, Naidu SS, Ohman EM, Smith PK. 2014

ACC/AHA/AATS/PCNA/SCAI/STS focused update of the guideline for the diagnosis and management of patients with stable ischemic heart disease: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines, and the American Association for Thoracic Surgery, Preventive Cardiovascular Nurses Association, Society for Cardiovascular Angiography and Interventions, and Society of Thoracic Surgeons. Journal of the American College of Cardiology. 2014;64(18):1929-49.

2. Questions and Answers on Unapproved Chelation Products. Silver Spring, MD: U.S. Food and Drug Administration.