

What is enhanced external counterpulsation (EECP)?

Enhanced external counterpulsation (EECP) is a procedure that has been primarily studied as a nonsurgical treatment for chronic stable angina and congestive heart failure. During EECP treatment, a series of cuffs are wrapped around the legs and buttocks. The heart rhythm is monitored and the cuffs are inflated and deflated in rhythm with the heart.

What is chronic stable angina?

Chronic stable angina is recurring chest pain or discomfort that usually happens during activity or stress. It is caused when the flow of oxygen-rich blood to the heart is reduced. Angina is often described as a pressure, heaviness or a squeezing in the chest. In some patients, the pain may spread to the jaw, shoulders or arms. It is usually a result of coronary artery disease.

How is chronic stable angina usually treated?

The treatments for chronic stable angina include lifestyle changes (such as exercise, quitting smoking) and medication (such as nitroglycerin tablets or other medications such as beta blockers, calcium channel blockers, cholesterol medications, or ACE inhibitors). In more severe cases, surgery may be needed.

What is congestive heart failure?

Congestive heart failure (CHF) is a condition that occurs when the heart becomes too weak or stiff to effectively pump enough blood through the body. CHF is usually a result of other conditions that cause damage to the heart such as coronary artery disease. Some common symptoms of CHF include shortness of breath (especially with increased activity) and swelling in the legs and ankles.

How is congestive heart failure usually treated?

The treatments for CHF include lifestyle changes (such as exercise, reducing salt intake, and weight loss) and medication (such as ACE inhibitors, digitalis, ARBs, aldosterone antagonists, beta blockers, diuretics, and vasodilators). In some cases, surgery may be needed to correct an underlying problem such as a damaged heart valve.

How does EECP work?

It is not really known how EECP works. The theory is that EECP may trigger the growth of new blood vessels in the heart, which can then improve blood flow to areas of the heart that have not been getting enough oxygen-rich blood. The improved blood flow then could decrease angina or CHF symptoms.

How long does EECP treatment take?

A total of 35 treatments are needed. They are usually given in one hour sessions, five times a week, for 7 weeks.

How well does EECP work?

There are no reliable published studies showing lasting health benefits from EECP. For example, it is not clear from the studies whether patients can reduce or discontinue medication for angina or CHF during or after treatment. It is also uncertain whether EECP is as effective as standard treatment options, such as lifestyle changes, medication and surgery.

What are the potential side effects with EECP?

The long-term safety of EECP is not known. Some patients experienced side effects including skin abrasions, blisters, and bruising, pain in the legs and back, swelling, worsening of chest pain, and heart attacks. It is not known whether all of these issues are directly related to EECP treatment.

Is EECP covered by Regence?

No. EECP has not been proven to be effective, so it is considered “investigational” and is not covered by Regence. You can find more information in the Regence Medical Policy, located at:

<http://blue.regence.com/trgmedpol/medicine/med66.html>.

How much does EECP cost?

A full course of 35 treatments usually costs at least \$12,000.

What do professional treatment guidelines say about EECP?

The American College of Cardiology (ACC)/American Heart Association (AHA) guidelines state that more information is needed before EECP can be recommended for the management of chronic stable angina or CHF.

THE BOTTOM LINE

The potential benefits and risks of EECP are still unknown. More study is needed to determine its safety and effectiveness.

Note: Regence physicians, nurses and pharmacists developed this summary to provide you with information about potential advantages and lack of advantages of EECP. This summary was developed based upon an evaluation of information from scientific studies and input from practicing doctors and specialists.