

Enhanced External Counterpulsation (EECP)

What is enhanced external counterpulsation?

Enhanced external counterpulsation (EECP) is a procedure in which blood pressure cuffs are put on your legs, and inflated and deflated. The sequence of the inflation and deflation is timed with the beating of your heart. EECP is used to treat angina (chest pain).

When is it used?

EECP may be used if you still have angina after treatment with medicine, bypass surgery, or angioplasty.

The procedure may not help if you have:

- high blood pressure despite treatment for it
- a fast heart rate
- problems with the circulation in your legs
- heart valve problems
- heart failure.

How does it work?

How EECP works is not well understood. It is thought that EECP forces slightly more blood into the blood vessels supplying the heart. Over time, this causes more blood vessels to grow in the heart muscle. Because angina is caused by the heart muscle not getting enough blood, growth of more blood vessels helps relieve angina.

How do I prepare for the procedure?

You may be more comfortable if you wear athletic tights or bicycle pants that don't bunch up under the blood pressure cuffs. It is a good idea to urinate before the procedure. If you take diuretics, you might want to delay taking them until after the procedure.

What happens during the procedure?

Most people are treated for 1 hour per day, 5 days a week, for 7 weeks, but your healthcare provider may change this plan. You lie on a table with a blood pressure cuff wrapped around each calf, and 2 cuffs placed around each thigh. The cuffs are connected to a device that inflates and deflates the cuffs, starting

with the calf and moving upward with each heart beat.
The procedure should not be painful.

What are the benefits of the procedure?

Most people treated with EECp have less angina than they did before the treatments began. The benefits may last for many months or several years.

What are the risks associated with the procedure?

There are few side effects or complications. You might have some irritation or bruising of the skin.

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