

A close-up photograph of a middle-aged man and a woman smiling warmly at each other. The man is on the left, wearing a dark polo shirt, and the woman is on the right, with her hand near his chin. The background is a clear, bright blue sky. The text 'ECP Therapy' is overlaid in the top right, and 'Helping Patients Improve Quality of Life' is overlaid in the bottom left.

# *ECP Therapy*

**Helping Patients  
Improve Quality of Life**

# ECP Therapy

External Counterpulsation, or **ECP therapy**, is a non-invasive treatment for patients suffering from advanced **Coronary Artery Disease (CAD)** and Heart Failure. ECP is specifically used to treat chronic *angina pectoris*, or chest pain.

ECP is a **low-risk** procedure that has been clinically proven to help **relieve** or **eliminate symptoms** related to heart disease and help many patients return to an active and fulfilling lifestyle.



# During Treatment

During ECP, the patient lies on a comfortable treatment platform. A technician attaches air **pressure cuffs** to the lower body on the **calves, thighs, and hips**. These cuffs are similar to blood pressure cuffs.

Next, the technician attaches **electrodes** to the patient's chest to **monitor their heart rhythm**. A computer then tracks and synchronizes the cuff inflation and deflation with the patient's heart rhythm. The cuffs are set to **inflate** and **deflate** with **each heart beat** when the heart is at rest.

ECP provides a good “**squeeze**” of the **blood vessels** in the lower body. The gentle “squeezing” **sends** freshly oxygenated **blood back toward the heart**. Some people find the pressure in the cuffs to be strong at first, but generally people acclimate over time.

# Treatment Goal

The goal of ECP therapy is to **improve** the **blood supply** and oxygen delivery to the heart muscle. This enhances the **development** of **collateral vessels**.

Collateral vessels are tiny blood vessels that form bringing additional blood flow beyond blocked areas in the heart. Ultimately, this process **helps** to **reduce** or **eliminate** pain.

This is how ECP works...

1

First, air pressure cuffs are secured to the patient's lower body. While the heart is at rest (diastole), the **cuffs** that are attached to the **calves** will begin to rapidly **inflate** toward the thighs.



2

Next, the **thigh cuffs** will begin to gently **inflate** compressing the blood vessels in the legs. This helps to increase the circulation of blood flow back toward the heart.



3

The **buttocks cuffs** will **inflate** last. This increases the blood flow to the coronary arteries which provide the much needed oxygen and nourishment to the heart muscle.



4

Lastly, **all cuffs** will **deflate** simultaneously prior to the next heart beat. This decreases afterload, or the workload of the heart when it contracts.





# Benefits of ECP

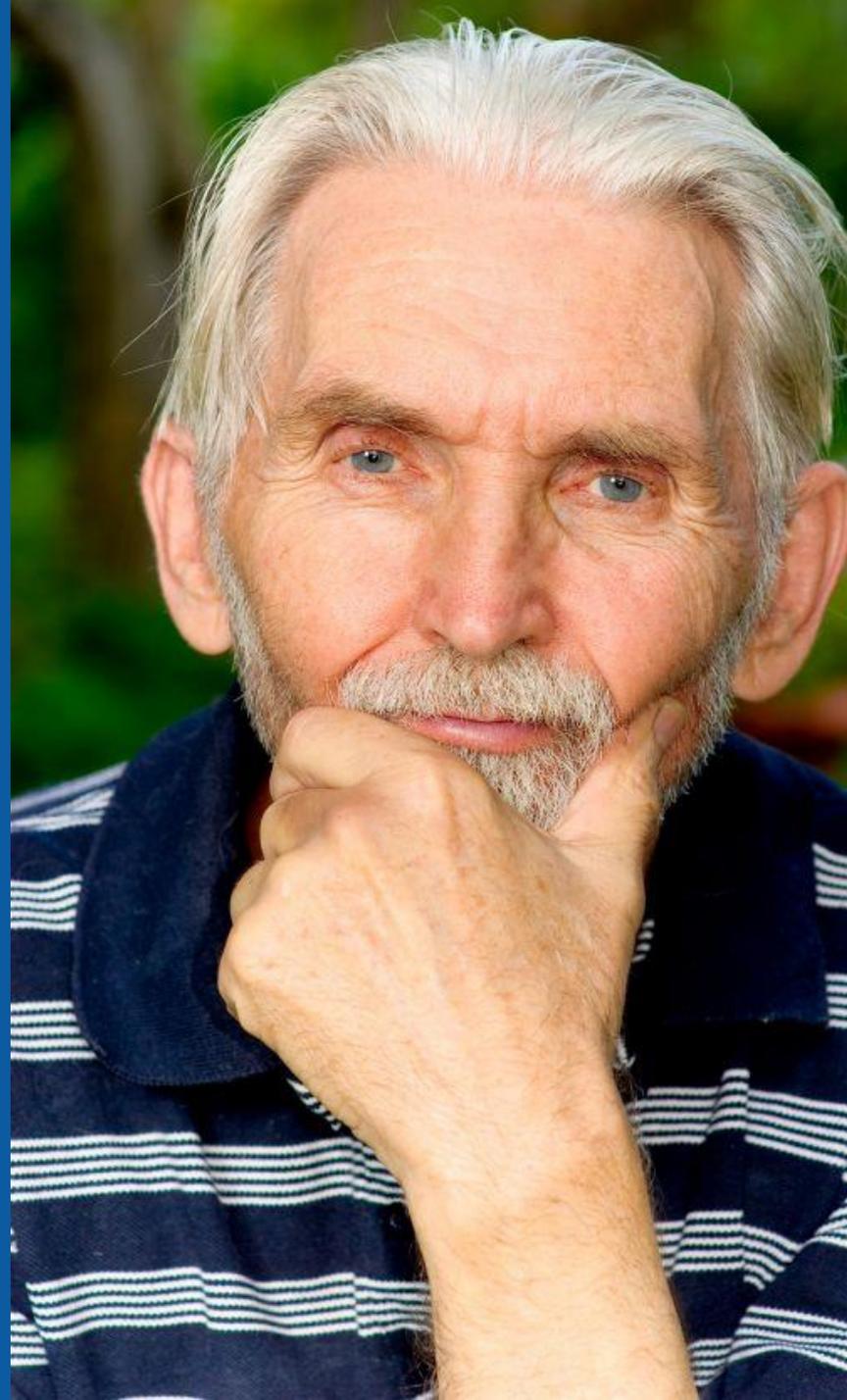
There are many benefits to ECP therapy:

- **Low-risk**, non-surgical procedure with virtually no side effects
- **Reduces symptoms** such as angina and shortness of breath
- **Reduces** some **medication** use
- **Increases energy** and exercise abilities
- **Improves quality of life**
- **Results** can **last** for years

Keep in mind that patient results can vary.

# Am I a Candidate?

- Have you had bypass surgery or angioplasty in the past?
- Do you ever get angina or shortness of breath when walking 1-2 blocks on level ground or climbing one flight of stairs at a normal pace?
- Do you ever awaken at night with chest pain, discomfort or shortness of breath? Do you feel that chest discomfort or shortness of breath limits your activities of daily living such as cleaning, house chores, or shopping?
- Do you ever get angina or shortness of breath at rest, after eating or just watching TV?





# Answering “Yes”

If you answered “yes” you may be a candidate for ECP therapy.

Discuss with your doctor if ECP therapy is the right treatment for you.

ECP therapy is not a suitable treatment for all patients. Consult your physician for a complete list of contraindications and possible side effects.