RAHT PVT LTD

Enhanced External Counterpulsation

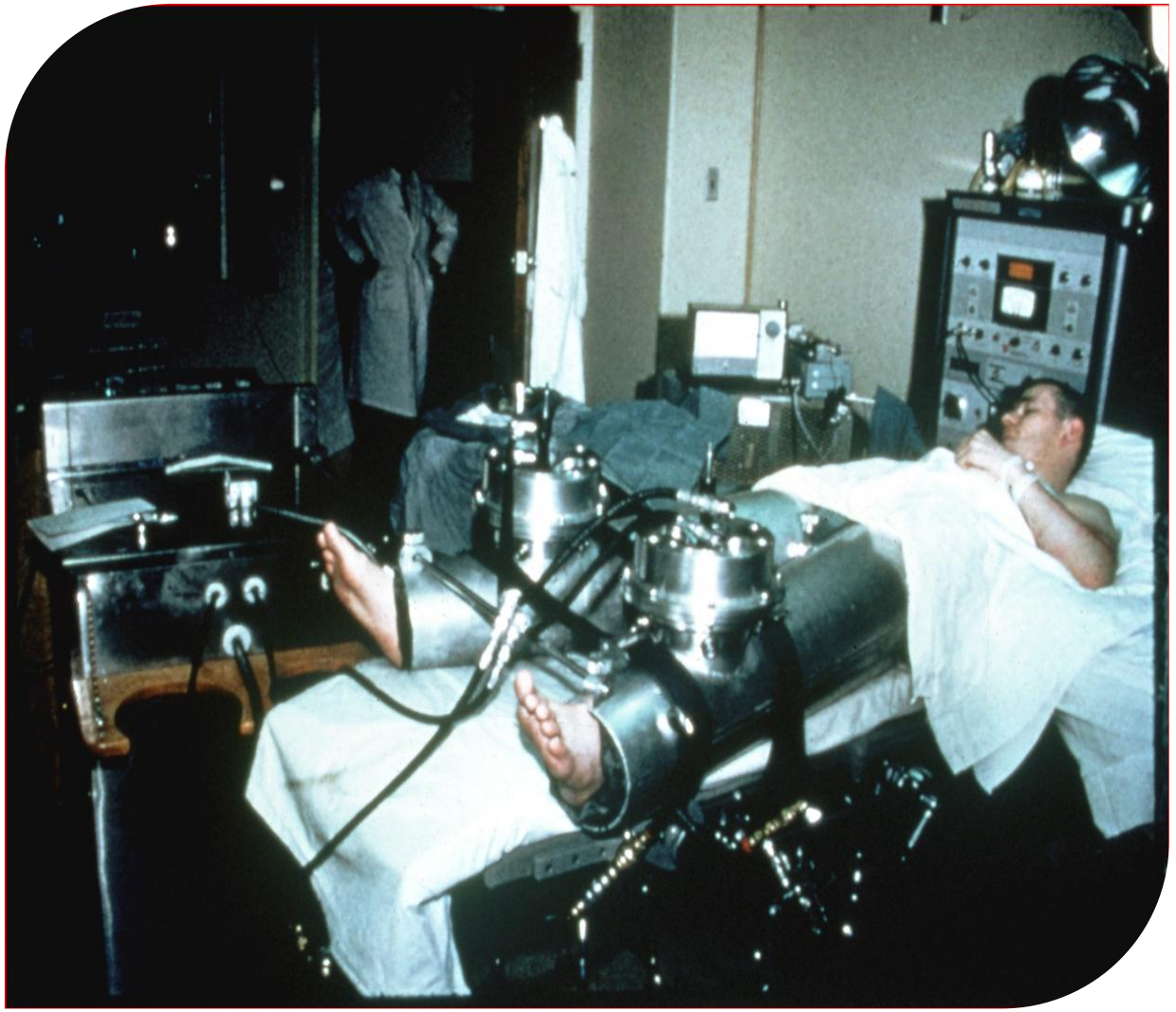
OM-A

Product

EECP stands for Enhanced External Counter Pulsation ——A non-invasive device for treating ischemic diseases.

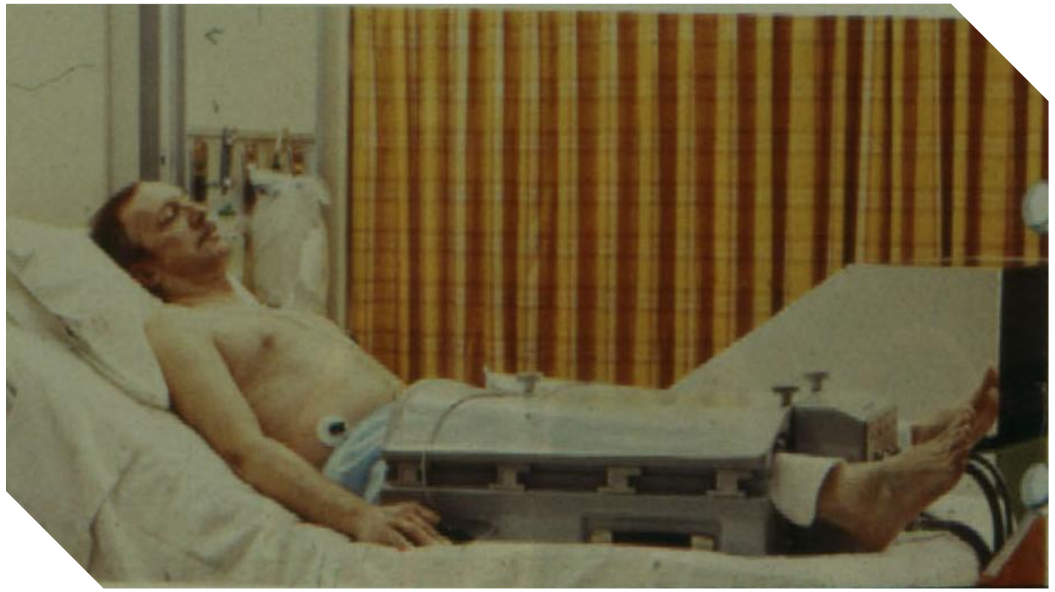
- EECP encourages blood vessels to open small channels around the narrowed or blocked arteries which eventually become"natural bypass" vessels to provide blood flow to heart muscle that will relieve or eliminate angina.
- It's also widely used in coronary heart disease, male functional sexual dysfunction, early high blood diseases, high blood sugar and poor blood circulation caused vertigo, dizziness, cervical spondylosis and physical fatigue.
- It's popular installed in rehabilitation centers, fitness clubs, heart clinics, and hospitals.

Development History



1962, US, ECP

In the 1960s, Prof. Soroff of Harvard University in the United States first developed.



- Non-sequential, hydraulic ECP
- Big Volume, Poor Treatment effect.

Development History

Early limb sequential EECP

The Father of EECP:
Prof. Zheng Zhen Sheng

EECP

Pro.Zheng made improvements based on the ECP machine:
1.Change the power source from water to air
2.Sequential compression from calf to hip

Results:Treatment effects is better,higher efficiency.

Authority Approval

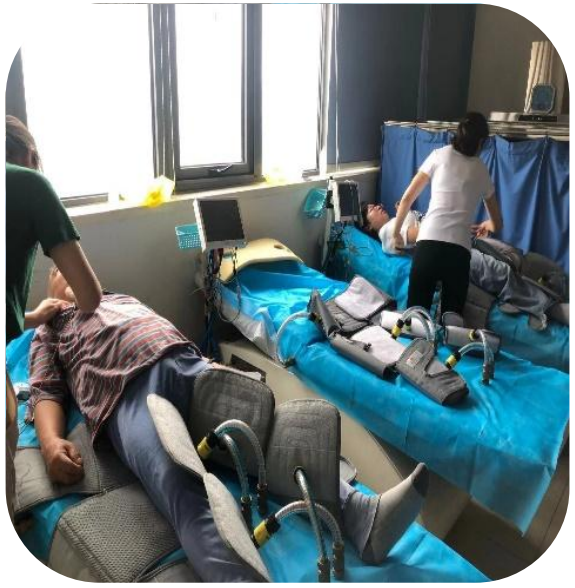
Then EECP therapy has been accepted and recommended by several major cardiac associations worldwide.

- In 2002, ACC, AHA included EECP in clinical treatment guidelines for coronary heart disease angina pectoris.
- In 2006, ESC and cardiovascular branch of Chinese medical association included EECP in clinical treatment guidelines for coronary heart disease angina pectoris.
- In 2012, EECP is recognized and accepted by Chinese ECP experts.

Product Certification

Our EECP has been approved by US FDA, SFDA, ISO13485, CE.

Reference Sites



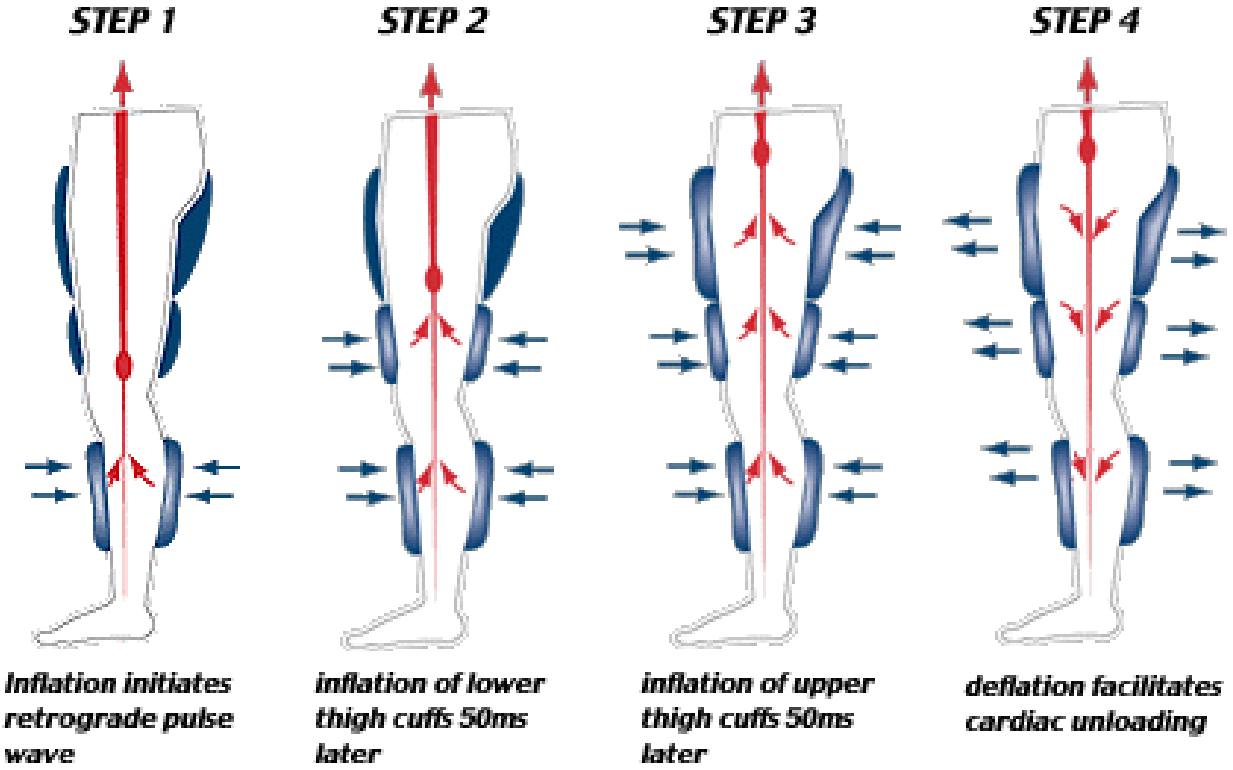
PART
02

Product Principle & Function

- Product Principle
- Treatment Mechanism
- Clinical Effect

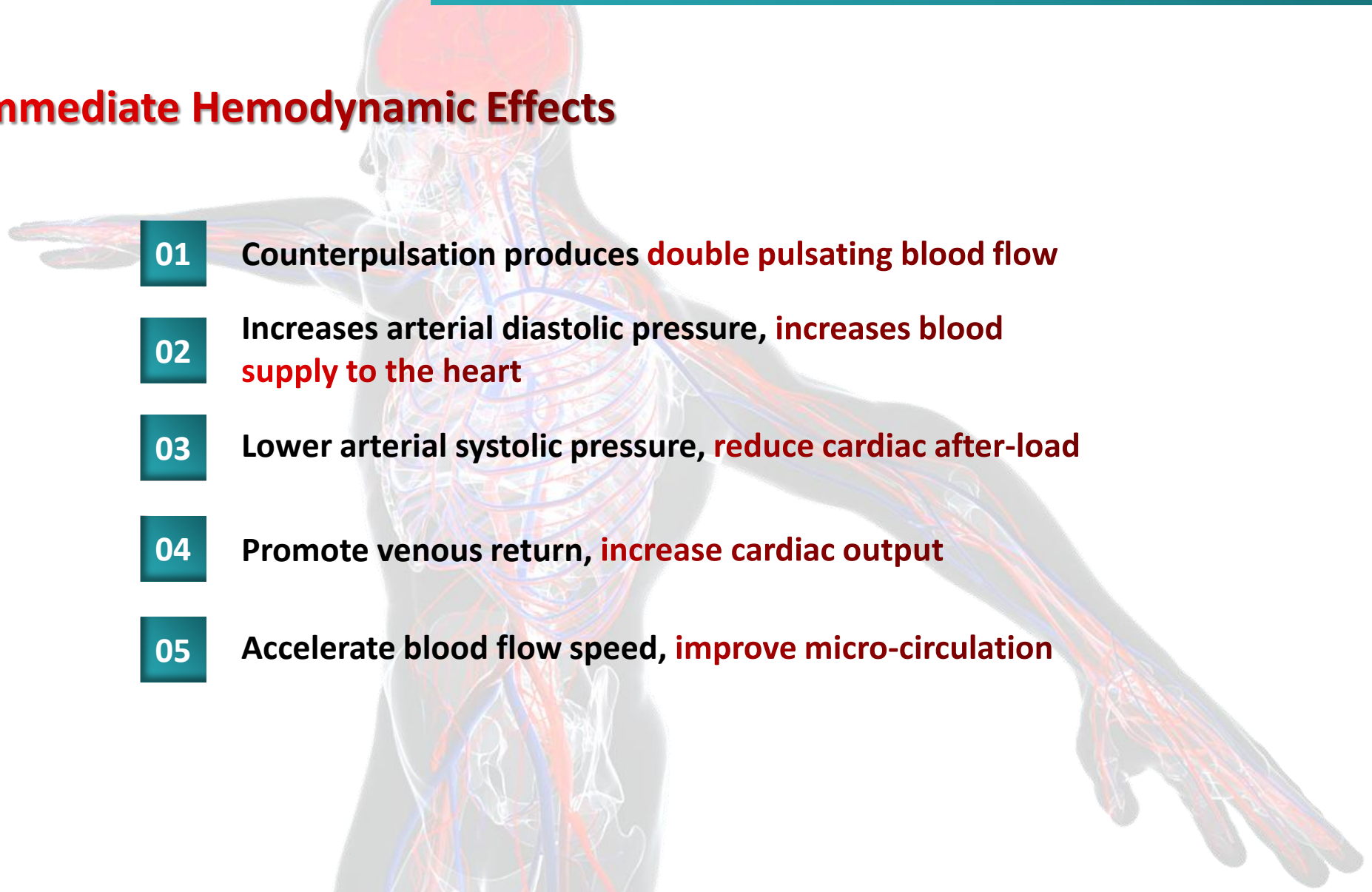
Product Principle

While EECP is performed, you will be lying on a bed wearing a series of pressure cuffs around calves, thighs, buttocks. The EECP system includes a pressure source that inflates and deflates these cuffs, the pressure moves the blood from your lower limbs toward the heart.



Treatment Mechanism

Immediate Hemodynamic Effects



01 Counterpulsation produces double pulsating blood flow

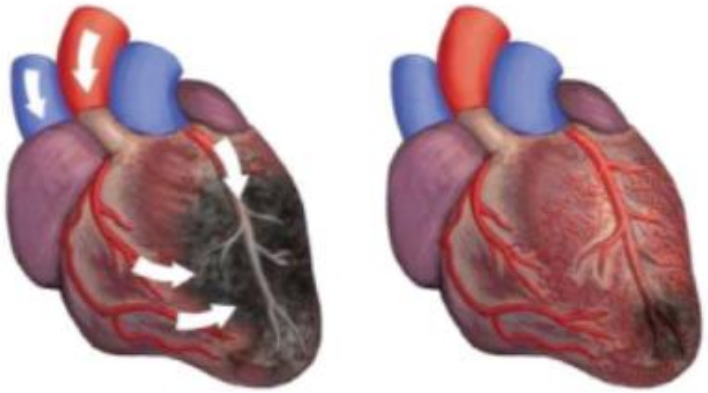
02 Increases arterial diastolic pressure, increases blood supply to the heart

03 Lower arterial systolic pressure, reduce cardiac after-load

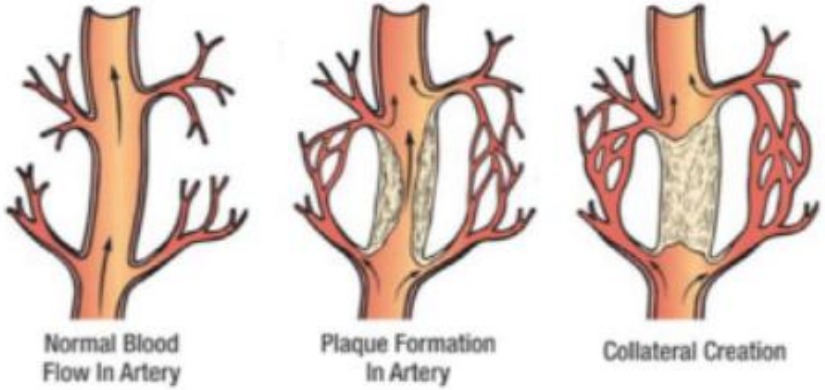
04 Promote venous return, increase cardiac output

05 Accelerate blood flow speed, improve micro-circulation

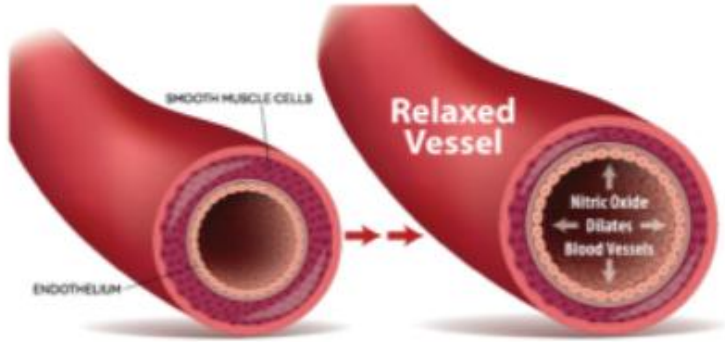
Clinical Effect



IMPROVE BLOOD FLOW TO THE HEART



BYPASS BLOCKAGES NATURALLY



PRODUCES NITRIC OXIDE & IMPROVES CIRCULATION

- ✓ Increase the shear stress of blood flow on vascular wall
- ✓ Improve vascular endothelial function and inhibit coronary artery spasm
- ✓ Increase myocardial perfusion, reduce left ventricular energy consumption
- ✓ Improve peripheral vascular function, improve exercise tolerance of patients

EECP and Sports: Similar mechanism

Do you know the relationship between the EECP and Sports?

EECP

Sports

- √ Increased cardiac output
- √ Accelerated blood flow
- √ Vasodilation
- √ Increased cardio-cerebral perfusion
- √ Increased blood flow shear stress

What are the similarities and differences between them?

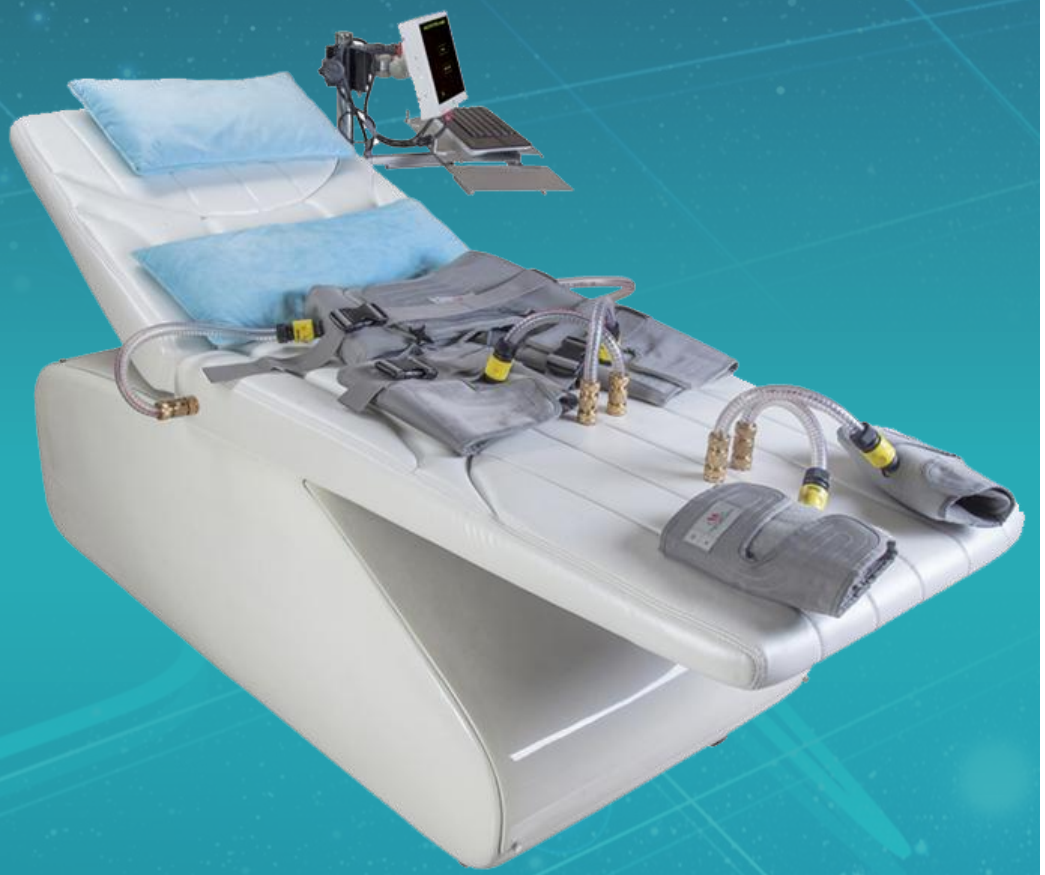
EECP and Sports: Different effects

	Heart Rate	Blood Pressure	Cardiac Load
EECP	Reduce 10bpm	Reduce 10mmHg	No difference
Sports rehabilitation	Increase	Rise	Increase

VS

But actually, EECP is a passive exercise that provides the same benefits as sports without increasing cardiac load, making it safer than sports.

EECP Indications



OM-A

Rehabilitation, Health Care, Eliminate Fatigue

- Convalescence after cardiac surgery
- Craniocerebral trauma and recovery from surgery
- Postoperative recovery of limbs
- Unable or unwilling to exercise
- Athletic and mental fatigue
- Sub-health, obesity, stress, poor sleep, excessive smoking and alcohol, sugar metabolism disorder, osteoporosis

Patients Protection

Our machine adopts patient protection system, it will automatically protect the patients by stopping air compressor inflate and keeping deflate at the same time. Followings(but not limited) will active the protection system:

1.Press emergency button (actuated by patient)

2.An early extra systole

3.Pressure of compressor exceed the max pressure 350 mmHg (this max pressure can be customized as per request)

4.Heart rate goes out of range <40 bpm or >120 bpm

5.Power outage occurs