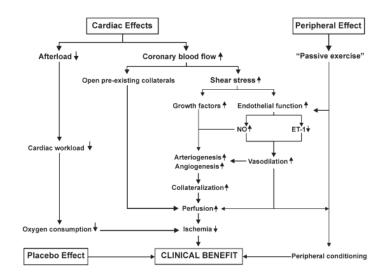
Opinion of Dr Santhosh Satheesh, Professor of Cardiology JIPMER Pondicherry on EECP THERAPY: submitted to TNCMCHIS

16 April 2019

Mechanism of action:



INDICATIONS:

1) ISCHEMIC HEART DISEASE

REFREACTORY ANGINA – Angina, when the patient is <u>unable to undergo revascularization</u>(PTCA or CABG) due to diffuse coronary artery disease or any other reasons, AND on <u>maximal optimal medical therapy</u> (beta blocker, ACE inhibitor, aspirin, clopidogrel(ticagrelor/prasugrel) nitrates, nikorandil, ranolazine)

Patients with Refractory Angina who are unable to tolerate medical therapy due to clear-cut contraindications

NOTE:

2) CONGESTIVE HEART FAILURE

Currently there is <u>NO</u> Guideline directed therapy to include EECP as a part of treatment of Heart Failure of any type and stage.

REFFERENCES:

- 1. 2013 ESC guidelines on the management of stable coronary artery disease
- 2. 2014 ACC/AHA/AATS/PCNA/SCAI/STS Focused Update of the Guideline for the Diagnosis and Management of Patients With Stable Ischemic Heart Disease
- 3. 2013 ESC guidelines on the management of stable coronary artery disease: the Task Force on the management of stable coronary artery disease of the European Society of Cardiology.
- 4. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure
- 5. 2013 ACCF/AHA Guideline for the Management of Heart Failure: Executive Summary
- 6. 2017 ACC/AHA/HFSA Focused Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure

HOW TO APPROVE EECP and HOW TO AVOID MISUSE

A. FOR REFRACTORY ANGINA

- 1. Patient should have CCS or NYHA Class 3 or 4 Angina at the time of application AND
- 2. Patient should have documented ischemia by a positive TMT or Stress Myocardial Perfusion imaging AND
- 3. Patient should have undergone Coronary Angiography showing significant coronary artery disease (>70%) in two or more territories or >50% in Left Main artery AND
- 4. A certification from the treating cardiologist that patient is on the maximally tolerated doses of anti angina therapy and patient is not a candidate for PCI due to reasons explained and that the patient is having Refractory Angina AND
- 5. A certificate from a Cardiac Surgeon that the patient cannot undergo CABG due to reasons explained. AND
- 6. Certificate from treating doctor that the patient has no Contraindications for EECP as listed in the manufacturers brochure

B. FOR HEART FAILURE

Currently there is NO available guideline to approve the use of EECP in the treatment of any form or stage of Heart Failure. Therefore the EECP Should not be approved for Heart Failure patients.

GUIDELINES

ESC 2013 Guidelines for management of Stable ischemic Heart Disease

Recommendations	Class a	Level ^b	Ref. c
EECP should be considered for symptom relief in patients with invalidating angina refractory to optimal medical and revascularization strategies.	lla	В	509,510

AHA 2014 Focussed update on management of coronary artery disease

Table 3. Recommendation for EECP

2012 Recommendation	2014 Focused Update Recommendation		
Class IIb	Class IIb		
 EECP may be considered for relief of refractory angina in patients with SIHD.⁴⁷ (Level of Evidence: B) 	 EECP may be considered for relief of refractory angina in patients with SIHD.⁴⁷ (Level of Evidence: B) 		

2