



PÉCSI TUDOMÁNYEGYETEM  
ÁLTALÁNOS ORVOSTUDOMÁNYI KAR

# Cardiological physiotherapy

**Kollárné dr. Kiss Gabriella**

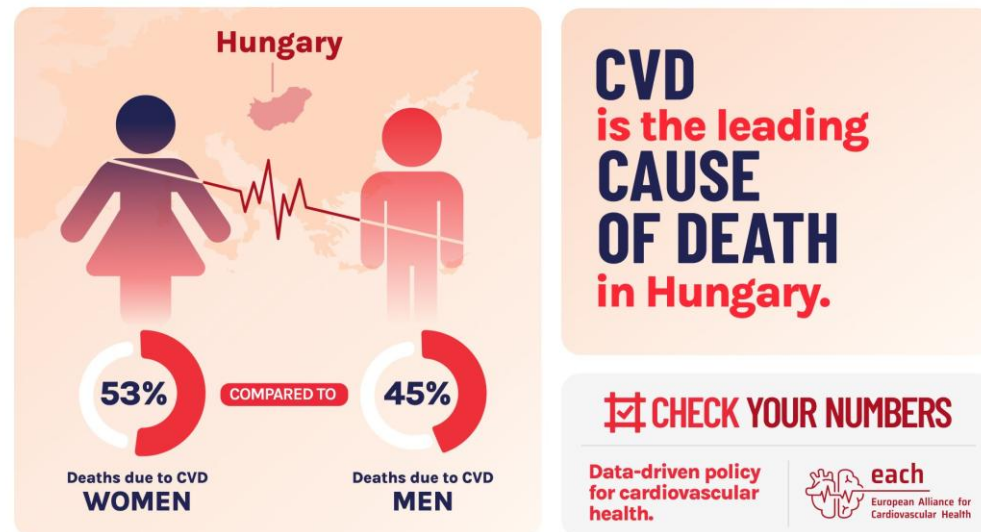
Physiotherapist  
University of Pécs, Faculty of Medicine  
Sport Medicine Department

24/02/2026 Pécs



# Rehabilitation of patients who have had an infarct

- 25–30 thousand people affected in Hungary every year, leading causes of death, higher mortality rate in women.



# Symptoms

- persistent (30 minutes) chest pain (sometimes hours)
- unrelated to physical exertion, no underlying cause can be identified
- nitroglycerin does not eliminate
- fear of death
- intolerable pain may last for hours (resolves on analgesia)
- retrosternal pain: tight, pressing
- may radiate: left arm, shoulder, back, epigastrium
- nausea, vomiting, sometimes accompanied by diarrhea
- restlessness, anxiety
- may be "silent" (common in diabetes and old age)



# **Coronary artery disease, physiotherapy in cardiac rehabilitation**



- **Definition of the early mobilization plan,**
- **Exercise may only begin at resting heart rate,**
- **In cases of bradycardia occurring during or after the exercise session,**
- **If blood pressure rises above 200/110 Hgmm,**

# STOP

- We must proceed in the same way if the patient reports retrosternal pain, becomes pale, develops dyspnoea, sweating, visual disturbance, headache, or dizziness.
- Even if the patient's heart rate is adequate and the ECG shows no abnormalities, but the patient perceives the exercise as overly strenuous, their assessment must be acknowledged, and the given level of exertion must not be continued.
- **Mobilization therapy is contraindicated in cases of pulmonary embolism, pericarditis, myocarditis, thrombophlebitis, and unstable angina.**

# Development of an exercise program



- **We should proceed according to the principle of gradual progression:** from passive to active movements, from movements of more distant joints to movements of proximal joints, from limb movements to trunk exercises, from lying to sitting, standing, and eventually walking. Exercise intensity is regulated by increasing the duration and frequency of the sessions. It is advisable for the patient to exercise twice daily.
- **Static, strenuous exercises involving breath-holding should be avoided, as they increase intra-abdominal pressure and impair venous return.**

# Stages of rehabilitation



## **Early rehabilitation:**

- Acute stage (0-2 weeks): in coronary care unit and cardiac surgery department

## **Late rehabilitation:**

- early/early-stage: from week 2 (6 at the latest) to week 12, in rehabilitation institute or outpatient
- late/post-acute stage: 3-6 months, usually in outpatient settings
- maintenance stage: usually until the end of life

# Aim of early rehabilitation

- prevention of adverse complications of immobilization,
- thromboembolism, pneumonia, deconditioning of the body,
- isomatrophy, intravascular volume reduction,
- orthostatic circulatory dysregulation,
- constipation,
- prevention of decubitus,
- treatment of anxiety, depression



# Aim of late rehabilitation

- reducing the adverse physiological, psychological and social effects of heart disease
- reducing morbidity and mortality
- halting and reversing the progression of arteriosclerosis
- increase the functional capacity of the patient
- improving exercise tolerance
- teaching and monitoring an appropriate exercise programme
- Improving psychosocial status, quality of life, work capacity
- assist return to work and daily life

## True or False

- “Heart patients are not allowed to exercise.”
- “Exercise increases the efficiency of the heart and reduces mortality.”



???

- What types of exercise do you think are recommended for heart patients?
- Can you give an example of a sport or exercise that might be too strenuous for a patient who has had a heart attack?



PÉCSI TUDOMÁNYEGYETEM  
ÁLTALÁNOS ORVOSTUDOMÁNYI KAR

# Thank you for your attention!