Potenzial der kardiovaskulären Rehabilitation und Sekundärprävention heute

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Cardiac rehabilitation implies restoration of one’s health from an acute affection.

Secondary prevention corresponds to a comprehensive risk factor management to reduce cardiovascular risk to improve survival, reduce recurrent events and improve quality of life.

Evidence of exercise based CR programs

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<tr>
<th>Recommendations</th>
<th>Class</th>
<th>Level</th>
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<tr>
<td>Participation in CR programmes for patients hospitalised for acute myocardial infarction and for patients with unstable coronary artery disease is recommended to improve patient outcomes.</td>
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<td>Preventive programmes for therapy optimisation, adherence and risk factor management are recommended for patients who are enrolled in CR programmes with DVD to relate disease recurrence.</td>
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Exercise-based CR reduced cardiovascular mortality compared with no exercise control (risk ratio 0.74).

No reduction in total mortality (RR 0.96)

The overall risk of hospital admissions was reduced with CR (RR 0.82).

No significant impact on the risk of myocardial infarction (RR 0.90), CABG (RR 0.96) or PCI (RR 0.85).

Anderson L, Thompson DR, Oldridge N, Zwisler AD, Rees K, Martin N, Taylor RS

Rehabilitation after myocardial infarction trial (RAMIT): multi-centre randomised controlled trial of comprehensive cardiac rehabilitation in patients following acute myocardial infarction

Robert R West,1 Dae A Jones,2 Andrew H Henderson3

"In this trial, comprehensive rehabilitation following MI had no important effect on mortality, cardiac or psychological morbidity, risk factors, health-related quality of life or activity."


Huge variation in:
- staffing levels and multi-disciplinary involvement (eg, dietetics, physiotherapy, psychology, occupational therapy)
- duration and frequency (eg, 4 to 20 weeks, once or twice weekly)
- intensity of exercise prescribed
- methods used to change health behaviour (eg, lectures, cognitive behavioural methods, written materials)
- method of delivery (eg, individual, group based, group based with ‘home exercise’, outpatient, self-management at home, home-based and menu based).
Standards and core components for cardiovascular disease prevention and rehabilitation (www.bacpr.com)

1. The delivery of the seven core components employing an evidence-based approach.
   1.1 Health behaviour change and education
   1.2 Lifestyle risk factor management (physical activity and exercise, diet, smoking cessation)
   1.3 Psychosocial health
   1.4 Medical risk factor management
   1.5 Cardioprotective therapies
   1.6 Long-term management
   1.7 Audit and evaluation

2. An integrated multidisciplinary team consisting of qualified and competent practitioners, led by a clinical coordinator.
3. Identification, referral and recruitment of eligible patient populations.
4. Early initial assessment of individual patient needs in each of the core components, ongoing assessment and reassessment upon programme completion.
5. Early provision of a cardiac rehabilitation programme, with a defined pathway of care, which meets the core components and is aligned with patient preference and choice.
6. Registration and submission of data to a national database.
7. Establishment of a business case including a CR budget which meets the full service costs.

The prognostic effect of cardiac rehabilitation in the era of acute revascularisation and statin therapy: A systematic review and meta-analysis of randomized and non-randomized studies – The Cardiac Rehabilitation Outcome Study (CROS)

Bernhard Ritzlof1, Constantinos M Stavrou1, Patrick Doherty2, Daniel Saum3, Maria-Ines Motzeder4, Annet Salzwedel4, Heinz Villroth4, Katrijn Jensen5 and Jean-Paul Schmidt6 on behalf

Outcomes: clinical course after the index event

Primary outcome:
- Total survival

Secondary outcomes:
- Cardiovascular mortality
- Major cardiovascular and cerebrovascular events
- Non-fatal myocardial infarction
- Non-fatal stroke
- Non-fatal revascularization
- Hospital readmission for any reason
- Unplanned hospital readmissions for any cardiovascular event
- Unplanned coronary revascularization
- Cardiovascular mortality + admission for any cerebrovascular event
- All combined endpoints including fatal and non-fatal events not predefined (revoked by the Cardiac Rehabilitation Outcome Study 2015)

Observation period:
- 6 months or more after hospital discharge

Intervention:
- Multi-component CR
  - Interventions:
    - No less than 3 months after hospital discharge
    - CR should be under supervision and responsibility of a rehabilitation centre (centre-based CR)
    - Definition of multi-component CR:
      - Structured and structured physical exercise at least twice a week in total: 4 to 6 times a week for a total of 30 to 60 minutes per session
      - Intensive lifestyle education
      - In-patient, out-patient or mixed. This rehabilitation will be included as long as the majority of CR sessions is centre-based and all other predefined criteria are fulfilled

Summary

Effects of cardiac rehabilitation (CR) are not “for granted”

Delivery of CR at the “highest level” (or “according to the guidelines”) is of utmost importance

Adherence to and long term maintenance of lifestyle changes and medications is crucial

The effects of CR cannot be measured by mortality reductions only; however other outcomes must be measured and reported, such as:
- exercise capacity
- success of smoking cessation intervention
- quality of life