Feasibility of home-based cardiac rehabilitation in athletes using a sports-specific telerehabilitation platform.

Published: 17-01-2025 Last updated: 31-01-2025

The purpose of this study is to determine the feasibility of sports-specific CTR in athletes.

Ethical review Approved WMO

Status Pending

Health condition type Coronary artery disorders

Study type Interventional

Summary

ID

NL-OMON57254

Source

ToetsingOnline

Brief title

Cardiac telerehabilitation in athletes

Condition

Coronary artery disorders

Synonym

Acute coronary syndrome, myocardial infarction

Research involving

Human

Sponsors and support

Primary sponsor: Maxima Medisch Centrum

Source(s) of monetary or material Support: Commissie Onderzoek en Innovatie (Máxima

MC)

Intervention

Keyword: Athletes, Cardiac rehabilitation, Exercise

Outcome measures

Primary outcome

The primary endpoint is adherence to training sessions.

Secondary outcome

Secondary endpoints include acceptability, usability of the CTR platform,

return to sport, effect on health related quality of life, effect on

psychosocial status, patient activation and medical costs.

Study description

Background summary

Athletes participating in cardiac rehabilitation (CR) have different needs and preferences compared to less active patients. Sport-specific cardiac telerehabilitation (CTR) could potentially be beneficial in athletes* rehabilitation to fit their needs and support them to regain their previous athletic performance and mitigate the risk of adverse cardiovascular events.

Study objective

The purpose of this study is to determine the feasibility of sports-specific CTR in athletes.

Study design

Single-centre feasibility study

Intervention

A twelve-week cardiac telerehabilitation program with sport-specific features and remote monitoring technology for home-based training.

Study burden and risks

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Participants of this study will use a more personalised and sport-specific CTR platform with integrated technological features. We hypothesise that the use of this tailored CTR program results in higher satisfaction and return to sport levels in athletes participating in CR. The results of this study will be used to improve the care pathway for athletes in CR and design a larger clinical trial. There is no increased risk associated with this study as we screen and monitor the athletes carefully. Subjects with high-risk conditions requiring hospital-based rehabilitation will be excluded from study participation. Participants will be closely supervised with frequent consultations and remote monitoring during exercise. Athletes will start with low and moderate intensity training sessions during rehabilitation and gradually increase exercise intensity during the program.

Contacts

Public

Maxima Medisch Centrum

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Scientific

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years) Elderly (65 years and older)

Inclusion criteria

- Recreational or competitive athletes who participate in cardiac telerehabilitation in

Máxima MC.

- Subjects referred to cardiac rehabilitation after an acute cardiac condition.
- Subjects using a chest strap for heart rate monitoring device of willing to use one

provided by the hospital.

- Sufficient digital capacity.

Exclusion criteria

Subjects with high-risk conditions requiring hospital-based rehabilitation

Study design

Design

Study type: Interventional

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Prevention

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-01-2025

Enrollment: 24

Type: Anticipated

Medical products/devices used

Registration: No

Ethics review

Approved WMO

Date: 17-01-2025

Application type: First submission

Review commission: METC Maxima Medisch Centrum (Veldhoven)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

CCMO NL88299.015.24