Trial Description

Title

Impact of seating position (recumbent, semi-recumbent, seated) on different performance parameters during exertion on a bicycle ergometer - ERGO Studie

Trial Acronym

ERGO

URL of the trial

[---]*

Brief Summary in Lay Language

Bicycle ergometric tests are common procedures in the assesssment of physical capacity in healty persons as well as in patients. Depending on the indication, this test is performed in a recumbend, a semi-recumbent or a seated position. In the context of sports therapy, patients usually train in a seated position.
Aim of this study is to evaluate the influence of seating position on different performance parameters, to interprete and calculate individual perfomances and generate adequate exercise recommendations for different seating positions. For this reason, 20 healthy test persons should be examined using a spiroergometry in three testing conditions (recumbend, a semi-recumbent or a seated position).
In a further implementation (Amendment Nr. 31/13_140100) 20 healthy test persons should be examined to compare three typical stress tests (two incremental tests, one ramp test) and evaluate their influence on different peformance parameters.

Brief Summary in Scientific Language

Bicycle ergometric tests are common procedures in the assesssment of physical capacity in healty persons as well as in patients. Depending on the indication, this test is performed in a recumbend, a semi-recumbent or a seated position. Patients usually are examined in a semi-recumbent position for a good ECG recording. In the context of sports therapy, patients usually train in a seated position.

Aim of this study is to evaluate the influence of seating position on different performance parameter (blood lactate concentration, heart rate, blood pressure, VO2 etc.) to interprete and calculate individual perfomances and generate adequate exercise recommendations for different seating positions. For this reason, 20 healthy test persons should be examined using a spiroergometry in three testing conditions (recumbend, semi-recumbent and seated). Examinations will take place in a random order.
In a further implementation (Amendment Nr. 31/13_140100) 20 healthy test persons should be examined to compare three typical stress tests (two incremental tests, one ramp test) and evaluate their influence on different peformance parameters.

Organizational Data

- DRKS-ID: **DRKS00004672**
- Date of Registration in DRKS: **2013/01/29**
- Date of Registration in Partner Registry or other Primary Registry: **[---]***
- Investigator Sponsored/Initiated Trial (IST/IIT): **yes**
- Ethics Approval/Approval of the Ethics Committee: **Approved**
- (leading) Ethics Committee Nr.: **31/13 , Ethik-Kommission der Albert-Ludwigs-Universität Freiburg**

Secondary IDs

Health condition or Problem studied

- Free text: **healthy participants**

Interventions/Observational Groups

- Arm 1: **investigation procedures: spiroergometry, recording physiological performance parameter; 3 assessment points in 3 weeks, random order (seated, semi-recumbent, recumbent)**
- Arm 2: **Further implementation (amendment): investigation procedures: spiroergometry, recording physiological performance parameter; 3 assessment points in 3 weeks, random order (ramp test, incremental test I, incremental test II)**

Characteristics

- Study Type: **Non-interventional**
- Study Type Non-Interventional: **Other**
- Allocation: **Other**
- Blinding: **[---]***
- Who is blinded: **[---]***
- Control: **Other**
- Purpose: **Other**
- Assignment: **Other**
- Phase: **N/A**
- Off-label use (Zulassungsüberschreitende Anwendung eines Arzneimittels): **N/A**

Primary Outcome

performance at the individual anaerobe threshold (IAS) in Watt

Secondary Outcome

economy of movement on the basis of following parameters: blood lactate concentration (mmol/l), workload (watt, watt/kg), heart rate (bpm), maximal oxygen uptake (VO2max), Rates of perceived exertion (RPE, Borg scale)

Countries of recruitment

- DE **Germany**

Locations of Recruitment

- other **Freiburg im Breisgau**

Recruitment

- Planned/Actual: **Actual**
- (Anticipated or Actual) Date of First Enrollment: **2013/01/29**
- Target Sample Size: **40**
- Monocenter/Multicenter trial: **Monocenter trial**
- National/International: **National**

Inclusion Criteria

- Gender: **Both, male and female**
- Minimum Age: **20 Years**
- Maximum Age: **80 Years**

Additional Inclusion Criteria

healthy adults (age 20-80), signed informed consent

Exclusion criteria

medical recommendation to avoid intensive load, acute or chronic restrictions on health or medical conditions, that argue against intensive load (infections, acute allergy, disease of the digestive system, of the cardiovasculare system or lungs, aches or fever)

Addresses

- **Primary Sponsor**

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Sources of Monetary or Material Support

- **Institutional budget, no external funding (budget of sponsor/PI)**

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Status

- Recruitment Status: **Recruiting complete, follow-up complete**
- Study Closing (LPLV): **2014/03/14**

Trial Publications, Results and other documents

** This entry means the parameter is not applicable or has not been set.*
**** This entry means that data is not displayed due to insufficient data privacy clearing.*