

Short term recombinant human Growth Hormone administration increases strength and power, but does it improve sporting performance in anabolic-androgenic steroid users?

Submission date 19/10/2006	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 27/10/2006	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 29/06/2016	Condition category Other	☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
280361999

Study information

Scientific Title

Short term recombinant human Growth Hormone administration increases strength and power, but does it improve sporting performance in anabolic-androgenic steroid users?

Acronym

rhGH on performance

Study objectives

Short-term recombinant human Growth Hormone (rhGH) administration increases strength, power and endurance performance in healthy, abstinent Anabolic-Androgenic Steroid (AAS) using weight lifters.

Ethics approval required

Old ethics approval format

Ethics approval(s)

University of Glamorgan ethics committee. Originally approved on the 22nd January 2002 (ref: SEC3), amended and final approval was granted on the 20th November 2002 (ref: SEC7).

Primary study design

Interventional

Study design

Double blind experimental trial

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Anabolic-Androgenic Steroid (AAS) users

Interventions

All physiological tests were performed in the same order for both the experimental group and the controls. Subjects were familiarised with testing procedures. Subjects were examined daily over a period of six weeks between the hours of 09:00 and 11:00 and were anonymous to each other.

Subjects were administered rhGH, under supervision, by subcutaneous abdominal injection, in a controlled hygienic environment, for six consecutive days in a dosage of 0.058 International Units (IU)/kg/day (0.019 mg/kg/day). Subjects were examined prior to the commencement of rhGH administration (day one), one day after six days administration (day seven), and eight days after cessation (day 14). Dietary intake was strictly monitored, using a fourteen day dietary recall.

The control group were an exercise control group and did not take an active substance.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Recombinant human Growth Hormone

Primary outcome(s)

Increased strength, power and endurance performance indices.

Key secondary outcome(s)

1. Reduced body fat
2. Increased fat free mass
3. Increased heart rate

Completion date

01/10/2004

Eligibility

Key inclusion criteria

Healthy individual weight lifters, who were previous experienced users of AAS, in a 12 week abstinent phase

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Not Specified

Sex

Not Specified

Key exclusion criteria

Positive urinalysis for ergogenic aids

Date of first enrolment

01/08/2004

Date of final enrolment

01/10/2004

Locations

Countries of recruitment

United Kingdom

Wales

Study participating centre
University of Glamorgan
1 Lantwit Road
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Sponsor information

Organisation
University of Glamorgan

ROR
<https://ror.org/02mzn7s88>

Funder(s)

Funder type
University/education

Funder Name
University of Glamorgan (UK)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/06/2007		Yes	No