Sports injury prevention in youth football

Recruitment status No longer recruiting	Prospectively registered	
	[] Protocol	
Overall study status Completed	[] Statistical analysis plan	
	[X] Results	
Condition category Injury, Occupational Diseases, Poisoning	Individual participant data	
	No longer recruiting Overall study status Completed Condition category	

Plain English summary of protocol

Background and study aims

Football (soccer) is the world's most popular sport and it is the largest team sport in Finland. The risk of injury is relatively high in football compared to other sports. However, despite this, there has been little research into how to prevent football injuries in young players aged between 10-14 years. Here, we want to investigate whether a comprehensive warm-up programme (intervention) in youth football will prevent injuries. We also want to know whether the programme improves player performance, and how the teams carry out this warm up.

Who can participate?

The Eerikkilä Sports Institute in the City of Tammela is a national football training centre in Finland. In every second year, the centre recruits 20 youth football clubs with young female and male players (aged 10-14 years) for a comprehensive player-development follow-up program called Sami Hyypiä Academy (SHA). Each player who is an official member of the SHA and is not suffering from a major injury will be included in the study.

What does study involve?

All clubs participating in the SHA project are randomly allocated into either the intervention or the control group. All coaches in the intervention group attend a theoretical and practical session on how to prevent football injuries. They are all given a tablet computer containing guidelines and videos of the comprehensive warm-up programme. The programme consists of six different exercises with progression focusing on young players' movement control, especially on core stability, knee control and ankle/foot function. Each team in the intervention group does the warm-up programme before football training sessions 2-3 times per week for 20 minutes. The teams in the control group are asked to continue their usual training. The study runs for 20 weeks.

What are the possible benefits and risks of participating?

The participating football clubs will receive an additional education session about the warm-up programme and the findings of the study. In addition, they will all be given a tablet computer and training materials by the research project. There are no obvious risks of physical injury in participating in this study. The warm-up training programme consists of basic exercises with low to moderate intensity. The main point in each exercise is to focus on safe technique. Taking previous injury prevention studies into account, no other risks seem to be likely.

Where is the study run from?

The study has been set up by the UKK Institute, Tampere, Finland in collaboration with the Sami Hyypiä Academy, Tammela, Finland.

When is the study starting and how long is it expected to run for? January 2015 to June 2015.

Who is funding the study? The Finnish Ministry of Education and Culture (Finland).

Who is the main contact? Dr Kati Pasanen kati.pasanen@ucalgary.ca

Contact information

Type(s) Scientific

Contact name Dr Kati Pasanen

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 04/11/2014 Pasanen

Study information

Scientific Title Sports injury prevention in youth football: a cluster randomised controlled trial

Acronym Terve Futaaja (Healthy Player)

Study objectives

It is hypothesised that by doing a comprehensive warm-up programme it is possible to decrease the incidence of sports injury.

Ethics approval required Old ethics approval format

Ethics approval(s) The Ethics Committee of Pirkanmaa Hospital District, 13/09/2013, ref: ETL-code R13110

Study design Cluster randomised controlled trial

Primary study design Interventional

Secondary study design Cluster randomised trial

Study setting(s) Other

Study type(s)

Prevention

Participant information sheet

Not available in web format, please use the contact details below to request

Health condition(s) or problem(s) studied

Sports injuries

Interventions

Participating football clubs will be randomised into the intervention or control group. The intervention group will do a comprehensive warm-up programme designed to prevent sports injuries before football training sessions 2-3 times per week. The control group will be asked to do their usual training.

The warm-up programme contains six different exercises with progression focusing on young players movement control, especially on core stability, knee control and ankle/foot function:

- 1. General warm-up exercise
- 2. Hip muscle exercise
- 3. Plank exercise
- 4. Single leg balance exercise
- 5. Single leg strengthening exercise
- 6. Single leg plyometric exercise

Intervention Type

Behavioural

Primary outcome measure

Football related acute and overuse lower limb injuries. Data will be collected prospectively during the intervention period using weekly text messaging: Players/parents will respond to standardised text message question, followed by individual injury interview

Secondary outcome measures

1. Any other injuries

Measured performance properties (strength, power, flexibility, agility, knee control, balance, aerobic fitness): Players will visit SHA before beginning of the intervention and during the spring of 2015. They will participate in performance tests during these SHA-camps
 Compliance: Individual participation on the intervention sessions will be registered by the coach on a player attendance form.

Overall study start date

15/09/2014

Completion date

07/06/2015

Eligibility

Key inclusion criteria

1. Registered at the SHA

- 2. Willing to patricipate in the study
- 3. Female and male players aged 10-14 years

Participant type(s)

Patient

Age group Child

Lower age limit 10 Years

Upper age limit 14 Years

Sex Both

Target number of participants 1500

Key exclusion criteria Major injury at the baseline

Date of first enrolment 29/10/2014

Date of final enrolment 01/12/2014

Locations

Countries of recruitment Finland

Norway

Study participating centre UKK Institute Tampere Finland FIN-33501

Study participating centre Sami Hyypiä Academy Tammela Finland FIN-31370

Study participating centre Research Institute for Olympic Sports Jyväskylä Finland FIN-40700

Study participating centre Oslo Sports Trauma Research Center PO Box 4014 Ullevål Stadion Oslo Norway 0806

Study participating centre University of Jyväskylä Finland FIN-40014

Sponsor information

Organisation

The Urho Kaleva Kekkonen (UKK) Institute for Health Promotion Research (Finland)

Sponsor details

UKK Institute PO.Box 30 Tampere Finland FIN-33501

Sponsor type Research organisation

ROR https://ror.org/05ydecq02

Funder(s)

Funder type Government

Funder Name

The Finnish Ministry of Education and Culture (Finland)

Results and Publications

Publication and dissemination plan

Many national and international reports will arise from this project. The aim is to publish the results in respected, peer-reviewed and high-impact international journals. In addition, the results will be reported at national and international congresses and meetings, as well as in practice-oriented medical and sports journals. The main reports of this injury prevention study will be finished not later than 31/12/2016.

Intention to publish date

31/12/2016

Individual participant data (IPD) sharing plan

IPD sharing plan summary Not expected to be made available

Study outputs					
Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Results article</u>	results	01/02/2019	29/01/2019	Yes	No