

Hip and groin related clinical and radiological parameters in professionele female football players

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1. To determine the prevalence of cam morphology in a sample of professional female football players. 2. To determine the prevalence of other hip related radiological features (e.g. neck-shaft angle, epiphyseal extension, lateral centre edge angle...

Ethical review	Approved WMO
Status	Pending
Health condition type	Joint disorders
Study type	Observational invasive

Summary

ID

NL-OMON51363

Source

ToetsingOnline

Brief title

PROFE hip study

Condition

- Joint disorders

Synonym

Cam morphology (bump)

Research involving

Human

Sponsors and support

Primary sponsor: Isala Klinieken

Source(s) of monetary or material Support: Beursfondsen; reeds toegekende aanvraag van AnnaFonds (aan Isala; niet aan deelnemende centra) en aanvraag gedaan bij lokale I&W

fonds Isala waarvan uitkomst nog volgt.

Intervention

Keyword: Femoroacetabular impingement, Football, Groin, Hip

Outcome measures

Primary outcome

Prevalence of cam morphology.

Secondary outcome

Secondary study parameters:

- Hip related radiological features, measured on radiographs (e.g. neck-shaft angle, epiphyseal extension, lateral centre edge angle, early signs of hip osteoarthritis)
- Radiological features of the os pubis region
- Associate cam morphology with hip range of motion, hip muscle strength, hip provocation-testing, palpation of clinical hip and groin entities, functional outcomes and symptomatology and quality of life
- Hip and groin related injury burden

Study description

Background summary

Limited evidence is available about radiological and clinical hip and groin related outcomes in professional female football. Hip and groin related injuries are highly prevalent in male football players. Hip morphology, for example cam morphology, plays an important role in hip and groin injuries. In some studies, cam morphology is associated with limited range of motion and increased risk of progression to hip osteoarthritis, whereas the association with hip-related groin symptoms remained inconclusive. These type of studies

are lacking in females.

Study objective

1. To determine the prevalence of cam morphology in a sample of professional female football players.
2. To determine the prevalence of other hip related radiological features (e.g. neck-shaft angle, epiphyseal extension, lateral centre edge angle and early signs of hip osteoarthritis).
3. To evaluate the radiological features of the os pubis region.
4. To associate cam morphology with hip range of motion, hip muscle strength, hip provocation testing, palpation of clinical hip and groin entities, functional outcomes and symptomatology and quality of life.
5. To determine hip and groin related injury burden.

Study design

Prospective cohort study with initially a cross-sectional design (multicentre study), with future intention to follow-up the participants.

Study burden and risks

One visit to the local hospital for completion of questionnaires (45 minutes), to undergo a physical examination including hip muscle strength and range of motion measurements (45 minutes) and to obtain radiographs of hip and pelvis (30 minutes). This visit will take approximately 2 hours in total per person. Radiographs of the pelvis and frog-leg lateral view per hip will result in a total of 0.8mSv radiation. Participants may benefit if they receive information about the current osseous state of their hip joint, their hip muscle strength and they can get insight in their current symptoms. As they are all professional football players, information about their hip joint and hip muscle strength can be valuable and add possibilities for injury preventative strategies in the future.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adolescents (16-17 years)

Adults (18-64 years)

Inclusion criteria

- Professional female football players performing at a professional football club in the Netherlands (Vrouwen Eredivisie) from clubs PEC Zwolle, PSV Eindhoven and FC Twente.
- Age 16 or higher.

Exclusion criteria

- History of systemic diseases concerning rheumatoid arthritis, spondyloarthropathies or juvenile idiopathic arthritis.
- Current pregnancy.

Study design

Design

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Basic science

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-01-2022

Enrollment: 100

Type: Anticipated

Ethics review

Approved WMO

Date: 24-02-2022

Application type: First submission

Review commission: METC Universitair Medisch Centrum Groningen (Groningen)

Approved WMO

Date: 29-09-2022

Application type: Amendment

Review commission: METC Universitair Medisch Centrum Groningen (Groningen)

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	NL79367.075.21
Other	zie sectie J.