Knee cap dislocation and mode of movement in babies

Submission date	Recruitment status No longer recruiting	Prospectively registeredProtocol		
03/01/2019				
Registration date	Overall study status Completed Condition category	Statistical analysis plan		
07/01/2019		☐ Results		
Last Edited		Individual participant data		
11/01/2019	Injury, Occupational Diseases, Poisoning	Record updated in last year		

Plain English summary of protocol

Background and study aims

Malformation of the grove within which the knee cap articulates is known as trochlea dysplasia. It is the most significant risk factor for dislocation of the knee cap, been present in >85% of patients with this. There remains no consensus on the cause. In the hip, one of the risk factors for malformation of the socket with which the thigh bone articulates (developmental dysplasia of the hip) includes things that happen soon after birth such as how the baby is carried and whether or not this allows the thigh bone to adequately impress on the socket. As such, there is a greater likelihood of developing developmental dysplasia of the hip in babies carried with hips extended compared to hips astride. It may be therefore that events soon after birth that affect whether or not the knee cap imprints on the trochlea also affect trochlea development. Infants differ in their method of early mobilisation. They may crawl, which places direct pressure on the knee cap likely causing it to imprint the trochlea. They may however bottom shuffle or go straight to walking. These do not place direct pressure on the knee cap, and may therefore result in an increased risk of trochlea dysplasia, which would result in a greater chance of dislocating the knee cap in later life. The aim is to find out if there is an increase in the likelihood of knee cap dislocation among people that were bottom shufflers and/or straight to walkers compared to those that crawled. Walking also changes the dynamics operating between the knee cap and the trochlea. A secondary aim will be to find out if there is any relationship between age of onset of independent walking and knee cap dislocation in later life.

Who can participate?

Patients identified retrospectively who have had an MRI scan of their knee in the last three years at university hospitals Birmingham.

What does the study involve?

A questionnaire shall be used for both the study and control groups.

What are the possible benefits and risks of participating?

No direct benefits to participants anticipated. Possible risks; Participants contact details shall be accessed without prior consent in order to contact them about the study.

Where is the study run from? University Hospital Birmingham, Heartlands, Solihull and Good Hope hospitals. Heartlands is the lead site

When is the study starting and how long is it expected to run for? June 2018 to December 2020

Who is funding the study? Funded by chief investigator; Bamikole Ogunwale

Who is the main contact?
Bamikole Ogunwale
bamikole_ogunwale@hotmail.com

Contact information

Type(s)

Public

Contact name

Dr Bamikole Ogunwale

Contact details

Radiology Department Birmingham Heartlands Hospital Bordesley Green East Birmingham United Kingdom B9 5SS

Type(s)

Scientific

Contact name

Mr Bamikole Ogunwale

Contact details

Radiology Department Birmingham Heartlands Hospital Bordesley Green East Birmingham United Kingdom B9 5SS

Additional identifiers

Protocol serial number 2017092RD

Study information

Scientific Title

Transient patella dislocation and mode of early mobilisation

Acronym

EMS & TPD

Study objectives

Determine if the mode of mobilisation used by babies pre-walking influences risk of patella dislocation in later life.

Ethics approval required

Old ethics approval format

Ethics approval(s)

East Midlands - Leicester South Research Ethics Committee, 02/01/2018, ref. 17/EM/0445

Study design

Case controlled study, single centre, observational

Primary study design

Observational

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Transient patella dislocation

Interventions

Participants shall be identified via a search of the radiology database using keywords. Questionnaires shall then be sent to participants asking them to identify their mode of mobilisation before walking and age at which they started walking. There will be no follow-up.

Intervention Type

Other

Primary outcome(s)

The type of early mobilisation used by patients with transient patella dislocation will be measured using a questionnaire developed for this study.

Key secondary outcome(s))

The age of independent walking (age at which first five unaided steps were taken) in patients with transient patella dislocation. will be determined using a questionnaire.

Completion date

31/12/2019

Eligibility

Key inclusion criteria

- 1. Age 10 to 35 years
- 2. Transient patella dislocation on MRI in last 3 years
- 3. Able to read English

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Mixed

Sex

All

Key exclusion criteria

N/A

Date of first enrolment

21/07/2018

Date of final enrolment

31/12/2019

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Birmingham Heartlands Hospital

Birmingham Heartlands Hospital Bordesley Green East Birmingham United Kingdom B9 5SS

Study participating centre Solihull Hospital

Lode Lane Solihull United Kingdom B91 2JL

Study participating centre Good Hope Hospital

Rectory Road Sutton Coldfield United Kingdom B75 7RR

Sponsor information

Organisation

University Hospitals Birmingham

ROR

https://ror.org/014ja3n03

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023		No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes