

Video-based physiotherapy assessment of knee osteoarthritis in patients with knee pain

Submission date 24/04/2025	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
Registration date 09/05/2025	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
Last Edited 25/09/2025	Condition category Musculoskeletal Diseases	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Knee osteoarthritis is a common condition with increasing prevalence, especially in older populations. The use of video-based consultations is growing in healthcare, but their validity and reliability in diagnosing knee osteoarthritis compared to traditional face-to-face assessments are not yet well established. This study aims to evaluate the validity and inter-rater reliability of physiotherapist-led video-based assessments for knee osteoarthritis compared to conventional face-to-face assessment.

Who can participate?

Participants must be aged 45 years or older, have experienced knee pain for at least 1 month, be able to communicate in Swedish, and have access to necessary technology (e.g., smartphone or computer). Individuals are excluded if they have previously been assessed for the current knee issue, undergone knee or hip replacement surgery, are currently receiving treatment for the condition, or have had recent knee trauma (within the past 4 weeks).

What does the study involve?

The study involves two assessment sessions per participant: one via video from the participant's home and one face-to-face at a rehabilitation clinic. The video assessments will be recorded for later review. Each participant will be evaluated by three licensed physiotherapists, and the sessions will take place in the same week. Participants will also provide demographic information and rate their knee pain.

What are the possible benefits and risks of participating?

Participants may benefit from a comprehensive assessment of their knee symptoms. The study aims to contribute to improved healthcare delivery through digital means. There are minimal risks involved; however, as with all clinical assessments, there is a slight possibility of discomfort during examination or misinterpretation of symptoms.

Where is the study run from?

The in-person assessments are conducted at Sportrehab in Frölunda, Göteborg, Sweden, and the video-based assessments are carried out using the regular digital platform of the clinic, with the physiotherapist based at the rehabilitation facility.

When is the study starting and how long is it expected to run for?
May 2024 to July 2024

Who is funding the study?
The Local Research and Development Council Gothenburg and Södra Bohuslän (Sweden)

Who is the main contact?
Elvira Lange, elvira.lange@gu.se

Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

Protocol serial number
282608 in researchweb.org FoUiVGR

Study information

Scientific Title
Video-based physiotherapy assessment of knee osteoarthritis in patients with knee pain: a validity and reliability pilot study

Study objectives
Assessment of knee osteoarthritis could be performed via video with comparable results to a clinical assessment.

Ethics approval required
Ethics approval required

Ethics approval(s)

approved 08/05/2024, Swedish Ethical Review Authority (Box 2110, Uppsala, 750 02, Sweden; +46 (0)10-475 08 00; registrator@etikprovning.se), ref: 2024-022 07-01

Study design

Pilot validity and reliability study

Primary study design

Observational

Study type(s)

Diagnostic

Health condition(s) or problem(s) studied

Knee osteoarthritis

Interventions

Participants were assessed by a physiotherapist in a traditional manner and additionally also assessed by a physiotherapist via video.

Intervention Type

Other

Primary outcome(s)

Concurrent validity: agreement between the video-based physiotherapy assessment and the conventional face-to-face assessment for diagnosing KOA (yes/no), measured once for each participant

Key secondary outcome(s)

Interrater reliability: agreement between the video-based assessment and the recorded video-based assessment for diagnosing KOA (yes/no), measured once for each participant

Completion date

04/07/2024

Eligibility

Key inclusion criteria

1. Age 45 years or older
2. History of knee pain for at least 4 weeks
3. Sufficient linguistic and cognitive ability to understand conversational Swedish
4. Access to a device for video conferencing, such as a smartphone, computer, or tablet
5. Ability to get to the rehabilitation clinic in Gothenburg

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

45 years

Upper age limit

100 years

Sex

All

Total final enrolment

35

Key exclusion criteria

1. Had been assessed by a physiotherapist or physician for the current knee pain
2. Arthroplasty of the knee or hip on the affected side
3. Ongoing treatment for the current knee pain or knee trauma over the past 4 weeks

Date of first enrolment

20/05/2024

Date of final enrolment

20/06/2024

Locations**Countries of recruitment**

Sweden

Study participating centre**Sportrehab Frölunda**

F O Petersons g 30

Västra Frölunda/Gothenburg

Sweden

42131

Sponsor information**Organisation**

The Local Research and Development Council Gothenburg and Södra Bohuslän

Funder(s)

Funder type

Research council

Funder Name

The Local Research and Development Council Gothenburg and Södra Bohuslän

Results and Publications

Individual participant data (IPD) sharing plan

The data are stored in a controlled-access facility at Region Västra Götaland. The data generated and analysed during the study are not openly available due to sensitivity concerns. Aggregated data can be obtained from the corresponding author upon reasonable request (Elvira Lange, elvira.m.lange@vgregion.se).

Dates of availability: request for data sharing is possible until May 2034.

Whether consent for data sharing was required and obtained from participants: no consent for sharing was obtained, so only aggregated data is available to share.

Comments on data anonymization: according to European data safety regulations, only aggregated data will be shared to avoid inaccurate anonymization.

Any ethical or legal restrictions: data sharing is limited by the Swedish secrecy regulations and the EU regulation GDPR.

IPD sharing plan summary

Stored in non-publicly available repository, Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		23/09/2025	25/09/2025	Yes	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes