KNGF Guideline for Physical Therapy in patients with Osteoarthritis of the hip and knee

Methodic approach

Referral by GP or specialist

Direct access screening

expressed care requirement, pattern recognition, red flags, physical therapy indicated?

Red flags
- unexplained raised temperature, swelling and redness of knee (bacterial infection?)
- unexplained pain in hip and/or knee
- swelling in groin (malignancy?)
- severe locked knee problems
- (severe) pain at rest and swelling without trauma (malignancy?)

If patient has one or more prosthetic joints:
- fever
- infection
- unexplained severe pain in hip and/or knee

(Supplementary) history-taking

Examination

Body functions/structures, e.g.: proprioception, pain, mobility, stability, muscle power, muscle endurance, alignment, muscular atrophy, hypertension

Activities, e.g.: transferring oneself, walking, standing, sitting, moving about, washing oneself, dressing and toileting

Environmental factors, e.g.: home adaptations and aids for ADL, work or sport, facilities, relatives, friends, care providers, colleagues

Personal factors, e.g.: comorbidity, lifestyle, character, experiences, self-efficacy, age, sex, ethnicity, profession, social background and disease perception

- presence of factors that may or may not be (directly or indirectly) modifiable by physical therapy
- presence of facilitators and barriers
- is physical therapy indicated for the intended therapeutic goal(s)?

Measurement instruments, at least:
- Patient-Specific Complaints (PSC)
- Timed Up and Go (TUG)

Analysis

general information, incl.
- diagnosis
- referral indication
- patient’s care requirement
- patient’s need for information

relevant medical data, health status, incl.
- radiographic abnormalities of joints
- comorbidity
- medication use
- prognosis, if applicable

ICF

Methodic approach
Recommended forms of therapy

**Exercise therapy**
- Supervised
- Tailored to individual goals in terms of activity limitations and participation restrictions

**Educational and self-management interventions combined with exercise therapy**

**Postoperative exercise therapy**
- Combination of passive and active exercise therapy
- Taping (patellofemoral osteoarthritis)

**Neither recommended nor discouraged**
- Manual therapy
- Hydrotherapy
- Thermotherapy (knee)
- TENS (knee)
- Combination of TENS and exercise therapy (knee)
- Knee brace / insoles (knee)
- Preoperative exercise therapy
- Preoperative education

**Preferably including:**
- Muscle strengthening
- Increasing aerobic capacity
- Walking exercise
- Functional exercise

**Consider, depending on individual goals:**
- Behavioral graded activity
- Balance and proprioception training

- Duration and frequency of exercise therapy depend on treatment goals (SMART)

**Evaluation**

**Measurement instruments**

- **Body functions and structures:**
  - VAS – pain
  - ROM
  - ICOAP
  - Hand-held dynamometer
  - MRC scale

- **Activities and participation:**
  - PSC
  - AFI
  - WOMAC
  - HOOS
  - KOOS
  - 6MWT
  - TUG test

**Discouraged**
- Heat delivery to joint
- Discouraged in case of inflammatory activity

**The following forms of treatment can be considered, depending on individual goals:**
- To alleviate pain in short term
- To support active exercise therapy
- To prepare for active exercise

**Additionally:***
- Knowledge about and understanding of consequences of disorder for exercise, activities, and participation, burden and tolerance
- Coping with complaints, active and healthy lifestyle
- Joint protection, aids

**Duration and frequency of exercise therapy depend on treatment goals (SMART)**

**Therapeutic process**

- Knowledge about and understanding of consequences of disorder
- Coping with complaints, active and healthy lifestyle
- Joint protection, aids

**6MWT: 6-minute walk test**
**AFI: Algofunctional Index**
**HOOS: Hip disability and Osteoarthritis Outcome Score**
**ICOAP: Intermittent and Constant OsteoArthritis Pain**
**KOOS: Knee injury and Osteoarthritis Outcome Score**
**MRC: Medical Research Council**
**PSC: Patient-Specific Complaints**
**ROM: Range of Motion (goniometry)**
**TUG: Timed Up and Go test**
**VAS: Visual Analog Scale**

**WOMAC: Western Ontario and McMaster Universities osteoarthritis index**