

IV CONGRESSO NAZIONALE



LA PRESA IN CARICO RIABILITATIVA DEL PAZIENTE CON COXARTROSI: TRATTAMENTO CONSERVATIVO COMBINATO.

Dott. Edoardo Milano
Dir. S.C. Medicina Fisica e Riabilitazione
Presidio Sanitario San Camillo Torino

Centro Congressi Unione Industriali
TORINO 11-13 MAGGIO 2023



SINTOMI DELLA COXARTROSI

Dolore all'inguine fino al ginocchio

Dolore nel cammino

Rigidità articolare

Dolore nell'alzarsi da seduto



fenotipi, endotipi

A



B



C





JOINT DISEASE

○ Inflammatory arthropathologies:

- Rheumatoid Arthritis
- Spondyloarthritis
- Polimyalgia reumatica

○ Degenerative arthropathologies:

- Primary OA
- Secondary OA

○ Dysmetabolic or endocrine:

- Chondrocalcinosis
- Gout
- Ochronosis
- Hemochromatosis
- Wilson's disease
- Acromegaly

○ Infections

○ Benign tumours

- Villonodular sarcoma
- Osteochondromatosis

○ Malign tumours

○ Vascular diseases:

Aneurism/thrombosis of the abdominal aorta or iliac vessels

PERIARTICULAR DISEASES

○ Bursitis:

- Trochanteric, iliopsoas, ischiogluteal

○ Tendonitis:

- Trochanteric e adductor

○ Acute calcific tendonitis

○ Heterotopic calcification

○ Bone diseases:

- Fractures
- Neoplasm
- Infection
- Osteonecrosis of femoral head
- Metabolic diseases (Paget, osteomalacia, hyperparathyr.)
- Algotrophy

○ Bone diseases in children:

- Congenital dysplasia - luxation, coxa vara, Legg-Perthes)

○ Neurological diseases: entrapment neuropathic

- Meralgia paresthetica
- Radicular compression: L2-L3-L4

○ Referred pain:

- Retoperitoneal structures
- Intra-abdominal structures
- Thoracic-lumbar spine



TERAPIA INDIVIDUALIZZATA



**DOVE
COME
FARMACO
DOSAGGIO
VOLUME**





Educazione del
paziente

Controllo della
sintomatologia

Riduzione della
disabilità

Controllo
dell'evoluzione



Osteoarthritis in over 16s: diagnosis and management

NICE guideline

Published: 19 October 2022

www.nice.org.uk/guidance/ng226

Received: 9 February 2020 | Revised: 15 May 2020 | Accepted: 16 May 2020 | *Musculoskeletal Care*. 2020;1–21.
DOI: 10.1002/msc.1492

CLINICAL UPDATE

WILEY

A clinical practice guideline for physical therapy in patients with hip or knee osteoarthritis

Mitchell C.M. van Doornaal¹ | Guus A. Meerhoff^{1,2} | Thea P.M. Vliet Vlieland³ | Wilfred F. Peter^{3,4}

Wainwright et al. *BMC Musculoskeletal Disorders* (2023) 24:344
<https://doi.org/10.1186/s12891-023-06456-0>

BMC Musculoskeletal Disorders

STUDY PROTOCOL

Open Access

CyclIng and EducATion (CLEAT): protocol for a single centre randomised controlled trial of a cycling and education intervention versus standard physiotherapy care for the treatment of hip osteoarthritis

Thomas W Wainwright^{1,2*}, Erika P Parkinson³, Tikki Immins^{1,2}, Sharon Docherty⁴, Elizabeth Goodwin⁵, Annie Hawton^{5,6,7}, Matthew Low^{1,2}, Joanna Samways², Tim Rees⁸, Geoff Saunders⁹ and Robert G Middleton^{1,2}

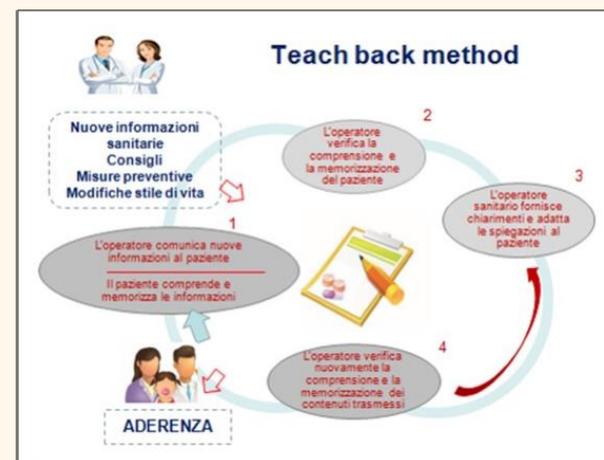
Osteoarthritis and Cartilage 31 (2023) 386–396

Osteoarthritis and Cartilage



Recommendations for the delivery of therapeutic exercise for people with knee and/or hip osteoarthritis. An international consensus study from the OARSI Rehabilitation Discussion Group

M.A. Holden †*, B. Metcalf ‡, B.J. Lawford ‡, R.S. Hinman ‡, M. Boyd §, K. Button ||, N.J. Collins ¶, E. Cottrell †, Y. Henrotin # †† ‡‡ §§, J.B. Larsen ||||, H. Master ¶¶, S.T. Skou ## †††, L.M. Thoma ‡‡‡, R. Rydz §, E. Wellsandt §§§, D.K. White |||||, K. Bennell ‡





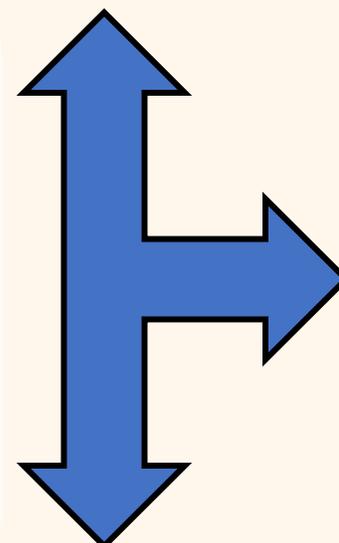
PRI

PROGETTO DI PERCORSO RIABILITATIVO INDIVIDUALE	
Cognome e Nome: _____	
Indirizzo e CAP: _____	
Data di nascita: _____	
Data di inizio sintomo: _____	
Data di inizio dolore: _____	
Data di inizio limitazione funzionale: _____	
Data di inizio limitazione attività: _____	
Data di inizio limitazione qualità di vita: _____	
Data di inizio limitazione partecipazione sociale: _____	
Data di inizio limitazione benessere psicologico: _____	
Data di inizio limitazione benessere fisico: _____	
Data di inizio limitazione benessere mentale: _____	
Data di inizio limitazione benessere spirituale: _____	
Data di inizio limitazione benessere ambientale: _____	
Data di inizio limitazione benessere culturale: _____	
Data di inizio limitazione benessere economico: _____	
Data di inizio limitazione benessere politico: _____	
Data di inizio limitazione benessere sociale: _____	
Data di inizio limitazione benessere familiare: _____	
Data di inizio limitazione benessere comunitario: _____	
Data di inizio limitazione benessere nazionale: _____	
Data di inizio limitazione benessere internazionale: _____	
Data di inizio limitazione benessere globale: _____	



✓ **RIABILITAZIONE**

- ✓ **Farmaci**
- ✓ **Azione educativa**
- ✓ **Supporto psicologico**
- ✓ **Supporto dietologico**
- ✓ **Valutazione posturale**
- ✓ **Ausili-ortesi**



✓ **AFA**

✓ **TERAPIA INFILTRATIVA**



**WOMAC
HHS**



British Journal of Rheumatology 1998;**37**:862–869

COMPARISON OF THE MOS SHORT FORM-12 (SF12) HEALTH STATUS QUESTIONNAIRE WITH THE SF36 IN PATIENTS WITH RHEUMATOID ARTHRITIS

N. P. HURST, D. A. RUTA* and P. KIND†

*Economics & Health Outcomes Unit, Department of Rheumatology, Western General Hospitals Trust, Crewe Road, Edinburgh EH4 2XU, *Department of Epidemiology & Public Health, Ninewells Medical School, University of Dundee, Dundee and †Centre for Health Economics, University of York, York*

Psychological Assessment
1995, Vol. 7, No. 4, 524–532

Copyright 1995 by the American Psychological Association, Inc.
1040-3590/95/\$3.00

The Pain Catastrophizing Scale: Development and Validation

Michael J. L. Sullivan and Scott R. Bishop
Dalhousie University

Jayne Pivik
The Rehabilitation Centre

Received: 28 February 2022 | Revised: 13 September 2022 | Accepted: 16 September 2022

DOI: 10.1111/1747-0080.12781

Nutrition & Dietetics WILEY
Journal of Obesity, Australia

REVIEW

The effects of dietary patterns and food groups on symptomatic osteoarthritis: A systematic review

Jiayu Zeng APD | Daniella Kate Franklin APD | Arpita Das PhD  | Vasant Hirani PhD



RIABILITAZIONE personalizzata: rieducazione motoria + T.O. + azione educativa.



Il sistema di ProKin 252





Clinical Biomechanics 101 (2023) 105858

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Clinical Biomechanics

journal homepage: www.elsevier.com/locate/clinbiomech



ELSEVIER



The biomechanical fingerprint of hip and knee osteoarthritis patients during activities of daily living

Sam Van Rossom^{a,b}, Jill Emmerzaal^{a,c}, Rob van der Straaten^c, Mariska Wesseling^a, Kristoff Corten^d, Johan Bellemans^d, Jan Truijien^{d,e}, Jan Malcorps^f, Annick Timmermans^c, Benedicte Vanwanseele^a, Ilse Jonkers^{a,*}



Medicina 2022, 58, 494. <https://doi.org/10.3390/medicina58040494>

Article

Highlighting the Benefits of Rehabilitation Treatments in Hip Osteoarthritis

Andrei-Flavius Radu¹, Simona Gabriela Bungau^{1,2,*}, Delia Mirela Tit^{1,2,*}, Tapan Behl³, Bogdan Uivaraseanu⁴ and Mihai Florin Marcu⁵

Weng Q, et al. *Br J Sports Med* 2023;0:1–8. doi:10.1136/bjsports-2022-105898

Review

Comparative efficacy of exercise therapy and oral non-steroidal anti-inflammatory drugs and paracetamol for knee or hip osteoarthritis: a network meta-analysis of randomised controlled trials

Qianlin Weng,¹ Siew-Li Goh ,^{2,3} Jing Wu,⁴ Monica S M Persson,^{5,6} Jie Wei,^{4,7} Aliya Sarmanova,^{5,6} Xiaoxiao Li,⁴ Michelle Hall,^{6,8,9} Michael Doherty,^{5,6,9} Ting Jiang,^{1,5,6,10} Chao Zeng ,^{1,4,11} Guanghua Lei ,^{1,4,11,12} Weiya Zhang^{5,6,9}

TERAPIA INFILTRATIVA: personalizzata ed ecoguidata

- ✓ Ac ialuronico (...)
- ✓ Derivato cortisonico
- ✓ Anestetici locali
- ✓ M.D. Collagen
- ✓ Ossigeno-ozono
- ✓ Proloterapia (?)

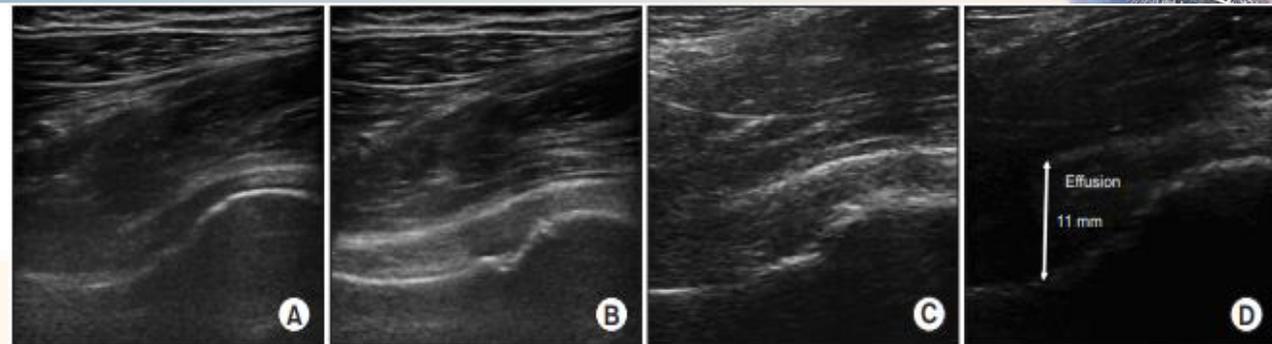


Fig. 2. Examples of femoral head score and hip joint effusion. (A) Normal: round femoral head. (B) Mild: slightly flattened. (C) Moderate: very flattened. (D) Hip effusion (11 mm). White arrow indicates bone capsule distance.

T. Sean Lynch, MD
Benjamin L. Oshlag, MD
Thomas S. Bottiglieri, DO
Natasha N. Desai, MD

Review Article

Ultrasound-Guided Hip Injections

J Am Acad Orthop Surg 2019;27:
e451-e461

J Rehabil Med 2023; 55: jrm00372

REVIEW ARTICLE

EFFICACY OF PROLOTHERAPY FOR OSTEOARTHRITIS: A SYSTEMATIC REVIEW

Yose WALUYO, MD, PhD¹, Sari Rajwani ARTIKA, MD^{1,2}, Insani Nanda WAHYUNI, MD^{1,2}, Andi Muh Aunul Khaliq GUNAWAN, B.MED³ and Ahmad Taufik Fadillah ZAINAL, B.MED³

From the ¹Department of Physical Medicine and Rehabilitation, Faculty of Medicine, Hasanuddin University, ²Cerebellum Clinic and ³Faculty of Medicine, Hasanuddin University, Makassar, Indonesia

DOVE
FARMACO
DOSAGGIO
VOLUME



TIMING
IS EVERYTHING





KJP

Korean J Pain 2023;36(2):195-207
<https://doi.org/10.3344/kjp.22325>
pISSN 2005-9159, eISSN 2093-0569



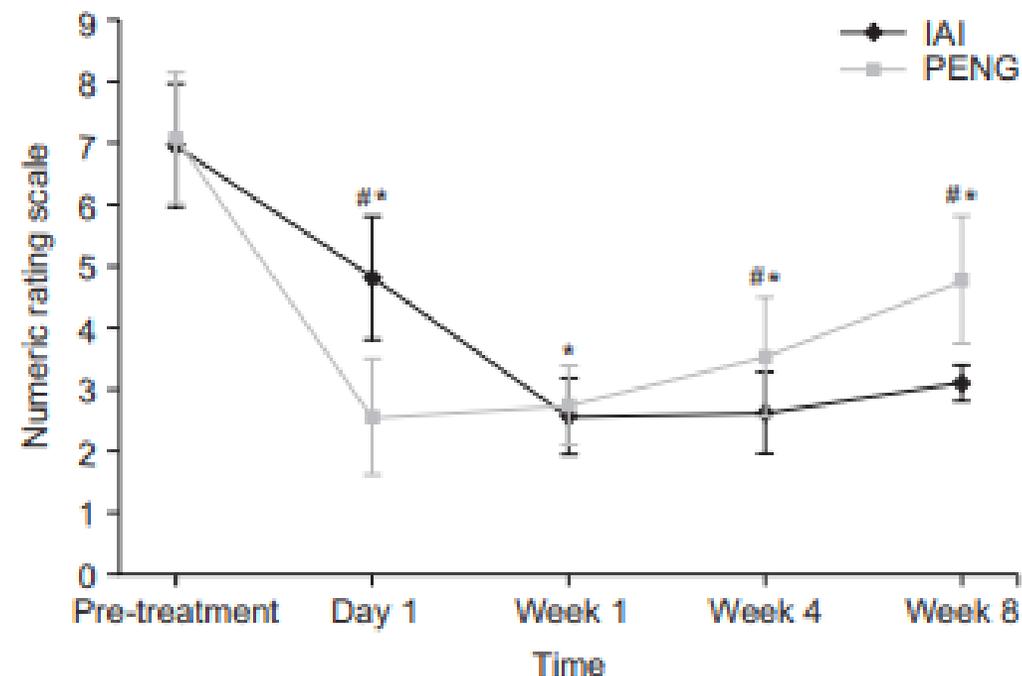
Clinical Research Article

Ultrasound-guided PENG block *versus* intraarticular corticosteroid injection in hip osteoarthritis: a randomised controlled study

Selin Guven Kose¹, Halil Cihan Kose², Feyza Celikel³, Serkan Tulgar⁴, and Omer Taylan Akkaya²

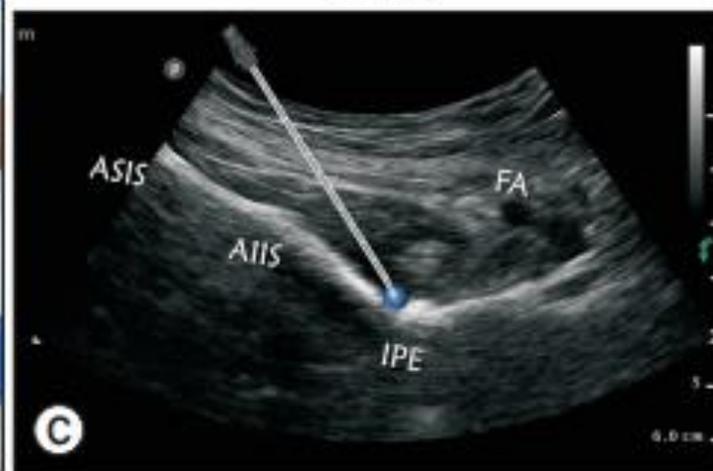
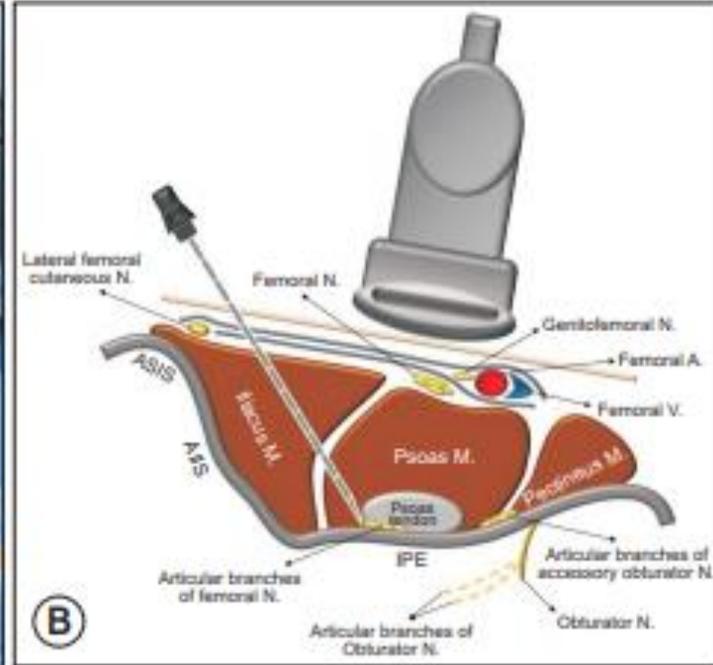
**Blocco (piano interfasciale) delle
branche peri-capsulari sensitive
(capsula articolare anteriore):**

- ✓ N. femorale
- ✓ N. otturatore
- ✓ N. otturatore accessorio





PENG BLOCK





ATTIVITA' FISICA ADATTATA personalizzata

Lopes et al. *Arthritis Research & Therapy* (2023) 25:14
<https://doi.org/10.1186/s13075-023-02996-x>

Arthritis Research & Therapy

RESEARCH

Open Access



Association of physical activity with physical function and quality of life in people with hip and knee osteoarthritis: longitudinal analysis of a population-based cohort

David G. Lopes^{1,2*}, Daniela Costa^{1,2,3†}, Eduardo B. Cruz^{2,4}, Nuno Mendonça^{1,2}, Ana Rita Henriques^{1,2}, Jaime Branco^{1,2,5}, Helena Canhão^{1,2} and Ana M. Rodrigues^{1,2,6}



Weber et al. *BMC Musculoskeletal Disorders* (2023) 24:221
<https://doi.org/10.1186/s12891-023-06255-7>

BMC Musculoskeletal Disorders

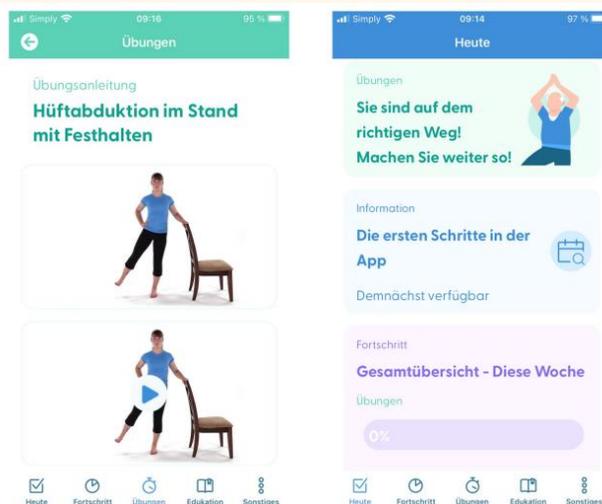
STUDY PROTOCOL

Open Access



Smartphone-assisted training with education for patients with hip and/or knee osteoarthritis (SmArt-E): study protocol for a multicentre pragmatic randomized controlled trial

Franziska Weber^{1,2*}, Carsten Müller¹, Carolin Bahns³, Christian Kopkow³, Francesca Färber⁴, Paul Gellert⁴, Ina Otte⁵, Horst Christian Vollmar⁵, Werner Brannath⁶, Freya Diederich⁷, Stephan Kloep⁶, Heinz Rothgang⁷, Valerie Dieter⁸, Inga Krauß⁸, Corelien Kloep⁹, Cindy Veenhof^{2,9}, Sandra Collisi¹⁰, Ute Repschläger¹⁰, Hannes Böbinger¹¹, Christian Grüneberg¹, Christian Thiel¹ and Dirk Peschke¹



IV CONGRESSO NAZIONALE





Management of osteoarthritis

Explain that:

- osteoarthritis is diagnosed clinically and usually does not need imaging to confirm diagnosis
- management is guided by symptoms and physical function
- the core treatments are therapeutic exercise and weight management, alongside information and support.

Exercise	Weight management	Information and support
<ul style="list-style-type: none"> • For all people with osteoarthritis, offer therapeutic exercise tailored to their needs (for example, local muscle strengthening, general aerobic fitness). • Consider supervised therapeutic exercise sessions. • Advise people it may initially cause pain or discomfort but long-term adherence to an exercise plan will benefit the joints, reduce pain and improve function. • Consider combining therapeutic exercise with an education programme or behaviour change approaches in a structured treatment package. 	<p>For people who are living with overweight or obesity:</p> <ul style="list-style-type: none"> • advise them that weight loss will improve quality of life and physical function, and reduce pain • support them to choose a weight loss goal • explain that any weight loss is likely to be beneficial, but losing 10% is likely to be better than 5%. <p>For guidance and information on weight management, including interventions for weight loss, see NICE's topic page on obesity.</p>	<ul style="list-style-type: none"> • Tailor information to the person's individual needs and ensure it is in an accessible format. • Advise where people can find further information on: <ul style="list-style-type: none"> ○ the condition and information that challenges common misconceptions ○ specific types of exercise ○ managing their symptoms ○ how to access additional information and support ○ benefits and limitations of treatment.

Manual therapy

Only consider for hip and knee osteoarthritis and alongside therapeutic exercise.

Devices

Consider walking aids for lower limb osteoarthritis.

Do not offer:

- acupuncture or dry needling
- electrotherapy treatments
- insoles, braces, tape, splints or supports routinely.

Pharmacological management

If needed, use:

- alongside non-pharmacological treatments and to support therapeutic exercise
- the lowest effective dose for the shortest possible time.

Review with the person whether to continue treatment. Base frequency of reviews on clinical need.

- Offer a topical non-steroidal anti-inflammatory drug (NSAID) for knee osteoarthritis.
- Consider a topical NSAID for other osteoarthritis-affected joints.

Consider an oral NSAID if topical medicines are ineffective or unsuitable and offer a gastroprotective treatment alongside.

Do not offer:

- paracetamol or weak opioids routinely, unless:
 - used infrequently for short-term pain relief
 - all other treatments are ineffective or unsuitable
- glucosamine
- strong opioids
- intra-articular hyaluronan injections.

Consider intra-articular corticosteroid injections for short-term relief when other pharmacological treatments are ineffective or unsuitable or to support therapeutic exercise.

Referral for joint replacement

Consider referring people with hip, knee or shoulder osteoarthritis for joint replacement if:

- joint symptoms are substantially impacting their quality of life **and**
- non-surgical management is ineffective or unsuitable.

Do not exclude people from referral for joint replacement because of age, sex or gender, smoking, comorbidities, or overweight or obesity.

This is a summary of the recommendations on managing osteoarthritis in [NICE's guideline on osteoarthritis in over 16s: diagnosis and management](#)

NICE National Institute for Health and Care Excellence

