



EFORT 2013: 7,500 orthopaedic specialists gather in Istanbul

## Exercise as a means of pain relief for patients with osteoarthritis

Exercise is one essential aspect of the treatment regime for patients with osteoarthritis of the knee and hip, according to current guidelines in developed countries. New strategies presented at the EFORT Congress in Istanbul underline the key role of exercise in relation to orthopaedic surgery. Exercise needs to be tailored individually for patients, and motivation is vital to success. Neuromuscular training is the frontline therapy.

**Istanbul, 7 June 2013** – Together with weight loss, where appropriate, and information on the condition, exercise is standard treatment for osteoarthritis in Europe and the United States. It can also play a key role in relation to orthopaedic surgery for this condition, said Prof Ewa Roos (Institute of Sports Science and Clinical Biomechanics, Faculty of Health Sciences, University of Southern Denmark, Odense). A well-designed programme of exercise prior to referral for orthopaedic surgery will help cut waiting lists and lead to better selection of patients likely to benefit from surgery.

It is paramount that patients with osteoarthritis of the knee and hip be given exercise regimes tailored to their individual needs, said Prof Roos at the 14<sup>th</sup> Congress of the European Federation of National Associations of Orthopaedics and Traumatology (EFORT) in Istanbul. "The 50-year-old man with a prior knee injury and the 75-year-old obese woman need very different exercise programmes," she said, "while these programmes also need to be individually adjusted as patients improve."

Prof Roos also emphasised the benefits of a training programme as regards pain relief, and the consequent effects on postponing total joint replacement. This aspect of an exercise regime on osteoarthritis treatment is currently frontline research in Scandinavian countries and there are several randomised control trials underway at the moment. "Exercising twice weekly for six weeks has an effect two to three times greater than that of full dose of pain killers and anti-inflammatory drugs," said Prof Roos. "It should also be remembered that these drugs have dangerous side effects on the stomach and heart, whereas the 'side effects' of exercise, improved physical function and better mood, are solely positive."

## Motivating patients matters

Motivating patients to adopt an exercise regime is vital. This is an area in which the role of the orthopaedic surgeon is particularly important, said Prof Roos. "The orthopaedic surgeon is a very important person in the osteoarthritis patient's life, and it is important to increase awareness among surgeons that they have a role to play in helping their patients understand the vital role of exercise in pain relief, improved physical function and better general health." Osteoarthritis patients need to be made aware of the general benefits of the exercise programme, since their condition can mean a shortened lifespan, particularly in cases where personal mobility is impaired. But there is a need to recognise that for some patients adopting an exercise programme may be a significant lifestyle change. "For long term adherence, it is important to find activities and exercise options the patient likes and feels comfortable with," said Prof Roos. "Patients with osteoarthritis are first and foremost





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people, and lifestyle changes are even more difficult when you have painful joints and are advised to exercise." Success generally depends on supervision of the patient's efforts, she said, usually by a physical therapist.

A fitness regime and strength training are generally good for everyone, but for those suffering osteoarthritis neuromuscular training is a particularly promising approach, said Prof Roos. "Neuromuscular training uses a biomechanical approach and was especially developed for patients with hip and knee osteoarthritis." Recognising the need for each individual patient to progress to their own ability, she also emphasises "safe pain measurement" in helping a therapist assess when a patient may move to the next level of difficulty.

## Recommendations: a 6 week supervised individual exercise regime for all osteoarthritis patients

Speaking from personal experience, Prof Roos said osteoarthritis patients, even severe cases, generally tolerate and do very well with exercise, often much to the surprise of surgeons. "The current evidence supports exercise as a safe and effective intervention for osteoarthritis patients. Based on that evidence and clinical experience I would recommend a 6 week supervised, individualised exercise programme for all patients with hip and knee osteoarthritis, together with information on their condition and weight loss where relevant." Exercise should be prescribed both before and after total joint replacement and has a role in avoiding athroscopic surgery. Prof Roos also said with the rapidly increasing number of osteoarthritis patients worldwide, the positive role of appropriate exercise regimes cannot be overemphasised. "Orthopaedic surgeons and physical therapists should collaborate for optimised treatment of the osteoarthritis patient, and a great majority of patients should be treated in primary care," said Prof Roos.

## About EFORT

The European Federation of National Associations of Orthopaedics and Traumatology (EFORT) is the umbrella organisation linking Europe's national orthopaedic societies. EFORT was founded in 1991 in the Italian Marentino. Today it has 42 national member societies from 43 member countries and six associate scientific members.

EFORT is a non-profit organisation. The participating societies aim at promoting the exchange of scientific knowledge and experience in the prevention and treatment of diseases and injuries of the musculoskeletal system. EFORT organises European congresses, seminars, courses, forums and conferences. It also initiates and supports basic and clinical research.

**Source:** EFORT Instructional Lecture: Training as non-operative treatment of patients with osteoarthritis of the hip or knee