THE MANAGEMENT OF KNEE PAIN

Knee pain related to osteoarthritis

- Knee osteoarthritis (OA) is a common cause of knee pain in older adults. Many factors contribute to knee pain related to OA including age, obesity and low levels of physical activity. Given these risk factors are on the rise in our society, so too is the impact of knee OA.

- Knee OA is characterised by stiffness in the knee, pain that is aggravated when going up or down stairs, limitation in range of motion, weakness and sometimes by a crunching feeling in the knee. Conventional X-rays can miss the early stages of knee OA so current practice tends to rely on symptoms and signs to diagnose knee OA.

Current best evidence for the management of knee pain

- The most recent guidance from the National Institute of Clinical Excellence (NICE 2008) recommends both pharmacological and non-pharmacological management options. Core treatments are advice and education, exercise and weight-loss followed by the safest pain medications such as paracetamol.

- Other recommended management strategies include the use of topical NSAIDs (creams that contain non-steroidal anti-inflammatory drugs), heat or cold packs, knee supports or braces, and capsaicin creams.

- Knee joint replacement is a major surgery and is usually best considered after trying other management options. Although knee replacement is a common procedure, results are not always satisfactory and some people continue to have pain and some limitation in function afterwards.

NICE 2008 OA Guidelines
www.nice.org.uk/CG059

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- Many people with knee OA tend to reduce their activity levels because of pain or because they believe it will make the problem worse. As a result, the muscles that support the knee become weaker and more stress is placed on the knee joint.

- Exercise helps maintain, and increase, strength, stability and flexibility of the muscles that support the knee, helping reduce stresses on the knee joint. Many people with knee OA find that exercise in warm water is enjoyable, whilst others find the support of health professionals helpful to find the right exercise programme for them.

A lack of regular physical activity almost doubles the odds of functional decline in people with OA.

What is new in the management of knee pain?

- Of the available treatments, exercise has been shown to help with pain, function and self-efficacy (confidence to get on with life, despite the pain), hence minimising the impact of knee pain on the individual, and possibly postponing joint replacement surgery.

- Two previous trials conducted within the Keele GP Research Partnership and the West Midlands physiotherapy networks have confirmed the beneficial role of exercise for knee pain in older adults (Hay et al, BMJ, 2007; Foster et al, BMJ, 2007). Key characteristics include individualisation of the exercise programme, supervision by a health professional, and progression (an increase in the difficulty of the exercise programme to ensure beneficial adaptations in strength, movement and balance).

- Lifestyle and adherence enhancing interventions appear to be important to support individuals to make real changes to their exercise and activity behaviours over the longer-term.

- A new trial, funded by the National Institute of Health Research (NIHR), is testing three different approaches to exercise for knee OA – the BEEP trial (Best Evidence for Effective exercise for knee Pain). More information can be obtained from Julie Young, the trial co-ordinator on j.young@cphc.keele.ac.uk, Professor Nadine Foster on n.foster@cphc.keele.ac.uk or Primary Care Research Network staff in your area.

Useful links
Map of Medicine: algorithm for knee pain
Arthritis Research UK: advice and exercise sheet
http://www.arthritisresearchuk.org/files/6027_OAK_04-3_06042010162518.pdf