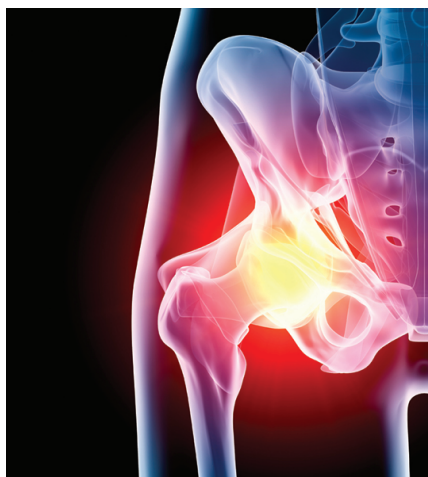


Managing osteoarthritis in primary care:

the GP as public health physician and surgical gatekeeper



Peripheral joint pain dominates musculoskeletal consultation rates in older people.¹ With populations steadily ageing, the inactivity and restricted participation associated with chronic pain in peripheral joints means that this problem is predicted to be the single major cause of 'years spent in disability' in the future.² This chronic pain syndrome in peripheral joints, or 'clinical osteoarthritis', may be associated with underlying pathology represented by loss of cartilage and thickening of bone around the joint that characterises the radiographic appearance of osteoarthritis. Such a picture is linked in the medical and public mind with the possibility of joint replacement, an intervention that is one of the great achievements of modern medicine.

GPs have long known that most of their older patients with peripheral joint pain are unlikely to need a joint replacement, while the public health perspective emphasises that a common syndrome of continuing pain and disability cannot be controlled as a major problem of population health by surgical operations alone. Older persons with the syndrome of clinical osteoarthritis have symptoms of pain and restricted activity that have to be managed in the context of each patient's psychological and social life. Meanwhile, the pathological picture of osteoarthritis has helped to create public perceptions (for example, that the disease inevitably occurs and progresses with age and with the wear and tear of physical stress and activity) that are wrong or unhelpful and that contribute to pessimism and negative attitudes about whether primary care can make a difference.

For the GP, the challenge seems straightforward: how best to manage clinical osteoarthritis and promote healthy joints in older people, and how and when to select the minority who may benefit from joint replacement. The National Institute for Health and Clinical Excellence (NICE) osteoarthritis guidelines in 2008 provided an answer.³ Core treatments (education, exercise, and weight loss if obese) should be offered to everyone, and continued over time as part of supported self-management of a long-term condition. These treatments should be interwoven, when necessary, with more specialised interventions, including referral for those with persistent pain or disability as candidates for a joint replacement.

NICE guidelines provide a powerful prescription about secondary and tertiary prevention of chronic pain and disability, equal in importance to the contribution of public health campaigns that tackle obesity and inactivity to primary prevention of osteoarthritis. Yet there is evidence that many patients are not being offered the core treatments in primary care,⁴ that surgeons continue to offer treatments that have no evidence base,⁵ and that disability levels in the older population have not been shifted by joint replacement surgery. Two papers in this issue of the *British Journal of General Practice*^{5,6} neatly highlight that a straightforward separation of patients into 'give this person with mild symptoms the core advice' and 'send this person with severe symptoms to the orthopaedic surgeon' may not have the intended results. Life is not quite as simple as that.

THE QUESTION OF EXERCISE

The topic of the paper by Williams *et al*⁶ is exercise for people with osteoarthritis. There is little doubt that exercise is beneficial in reducing pain and improving mobility in older patients with chronic joint pain, especially in the knee.⁷ But there are challenges for primary care of how to

provide advice to the many people with this problem, and how to overcome barriers to exercise that may be linked to people's preconceptions (for example, that exercise may harm their joint⁸), or to their motivation.

Recent trials of physiotherapy-supported exercise interventions indicate that longer-term change is achievable,⁹ but Williams and colleagues rightly ask if something simple may encourage and maintain activity change, such as the use of a booklet given to everyone with clinical osteoarthritis in the hip or knee, designed specifically to overcome beliefs and attitudes that are barriers to exercise. Results of their proof-of-principle study suggest that a large trial to investigate this question would be feasible, but that any benefits in terms of extra numbers starting and maintaining exercise are likely to be modest, and that ways to repeat or reinforce advice over time need to be tested.⁶

Why is it important, as Williams *et al* propose, to pursue the investigation of such small effects? One answer relates to GPs' responsibility for their population as well as their concern to help the individual. Clinical osteoarthritis is very common: chronic knee pain that restricts activity affects 25% of people aged over 50 years in any 1 year.¹⁰ If simple safe interventions with small effect sizes were to be provided for every older person who has chronic joint pain in a practice population — an ambition that would be greatly helped if the current lack of quality targets for osteoarthritis in primary care were corrected — the GP would be acting as public health physician, as small average effects can improve many people's lives because of the large number with the problem. For this to have maximum population effect, may mean that general practice has to consider management of clinical osteoarthritis in the same way as smoking cessation, involving opportunistic screening to identify the people with the problem and provision of periodic advice, support, and intervention.

"There is evidence that many patients are not being offered the core treatments in primary care ... and that disability levels in the older population have not been shifted by joint replacement surgery."

THE QUESTION OF WHEN TO REFER

The topic of McHugh *et al*'s paper⁵ takes us to the other end of the spectrum and provides a description of the people whom GPs refer to surgeons for an opinion on joint replacement and what happens to them. The researchers found that only a minority of persons referred had a joint replacement in the following 12 months although, reassuringly, this minority were likely to have had more severe pain and more disability when referred than those who did not subsequently have an operation. Only a small proportion were still waiting for a recommended joint replacement a year on, and the rest were receiving a range of non-operative approaches. The study reminds us that patients' decisions will not neatly align with their pathology or their symptoms (10% chose not to have an offered operation), and that the scientific evidence base for who should or should not be referred or have an operation remains thin.

These results provoke the research question as to whether selection for joint replacement could be enhanced by first ensuring optimal primary care treatment has been delivered (only a minority of persons referred to the surgeons reported having received the NICE core interventions), and by addressing other influences on chronic pain (persons who did not have an operation were more likely to have a comorbidity, and research by others has established that effective treatment for comorbidities, such as depression in patients with osteoarthritis, can itself result in improvements in joint pain and mobility¹¹).

The two papers reported in this issue of the Journal^{5,6} point to an expanding evidence base that rejects the idea that primary care for osteoarthritis is about waiting until it is time to refer for a joint replacement. Not only are there simple positive approaches to reduce joint pain and disability in older people, but joint replacements, valuable and important as they are, will not be needed or wanted by everyone with osteoarthritis, and remain in need of a better evidence base to clarify optimal patient selection and timing of surgery.

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