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THERAPY

How to be NICEr in treating osteoarthritis

Philip G. Conaghan

Standfirst

Current guidelines for the treatment of osteoarthritis involve exercise and lifestyle modifications as well as pharmaceutical therapeutics for effective pain management. Is this message reaching patients, and are they exercising enough?

Refers to Healey, E. L. et al. Uptake of the NICE osteoarthritis guidelines in primary care: a survey of older adults with joint pain. *BMC Musculoskelet. Disord.* **19**, 295 (2018).

Main text

Osteoarthritis (OA) is an increasing problem for individuals and our health care systems, especially with ageing societies and the increasing prevalence of obesity¹. Healey et al.² have reported a large (4,059 respondents who consulted their primary care physician about joint pain in the previous 12 months) UK community-based patient survey of OA management. They used this survey to evaluate how people with OA have been using the therapies recommended by the UK National Institute for Health and Clinical Excellence (NICE). NICE provides national clinical guidance on the basis of a robust synthesis of systematic literature reviews, health economic data, expert opinion and patient input. Although these guidelines are primarily aimed at NHS health care providers, the Healey et al.² survey (performed between May 2011 and April 2012) enables us to see what patients registered in 8 sites in the West Midlands and North West of England were doing a few years after the first NICE OA clinical guidelines were published in 2008(REF³). The survey is, of course, reported information and therefore is limited by patient recall bias.

An important issue raised by Healey et al.² is that of multi-site joint pain; 80% of participants in the study reported such pain. However, guidelines have failed to advise on how to manage this group of patients, in part because there are very few trials in this area. Treating the whole patient is critical and needs to be the focus of future musculoskeletal research and therapy.

Healey et al.² report that patterns of usage of most OA therapies were depressingly low, especially for muscle-strengthening exercises, but mostly in line with other surveys that have looked at use of current OA therapies in the UK⁴, EU^{5,6} and USA⁷; however these surveys often focus on pharmacological therapies^{4,5}. The uptake of therapies was generally lower than in another survey (from 2011-2012) of approximately 2,000 patients⁴ from the broader UK population rather than the regional population surveyed by Healey et al.² Therefore, the reduction in uptake and other differences might reflect the larger sample size in the Healey et al.² study, or might be reflective of issues that are specific to some regions of the UK.

One similarity across international studies has been the limited use of pharmacological therapies such as oral NSAIDs and opioids, probably reflecting the limitations of these therapies (rather than lack of prescription), especially their toxicities and contra-indications which substantially limit application to people who might have multiple comorbidities. A diminishing use of drug therapy is especially appropriate among an elderly population. The usage of these therapies might also reflect some dissatisfaction with the perceived benefits—a large proportion of people with OA pain have substantial levels of persistent pain despite using existing pharmacological therapies including NSAIDs and opioids⁶. Therefore, we have a real problem in that it seems we are not treating joint pain very well in the community and patients are not following the principles laid out in clinical guidance.

So what can we do to treat OA better and more easily? Something not often looked at in such surveys is the provision of written information to patients; overall only 23% of respondents in the Healey survey reported being given this information. Apart from talking about pain management, patients often report discussing with doctors their fears about OA and its impact on their lives, and about primary health care support⁴. Many of these important issues can be addressed with adequate provision of information, advice on local facilities and directing patients to trusted, evidence-based information websites. Creating a list of such information for patients for each local practice is a relatively quick task and probably would only require annual updates.

In the Healey et al.² survey, it is unclear if uptake of muscle strengthening exercises and manual therapy reflect exposure of these patients to physiotherapy programs. Also, there is often a lack of community understanding of what constitutes aerobic activity; some patients mistakenly think this means being part of a supervised activity. Despite the efficacy of simple and safe non-pharmacological interventions (such as exercise) for OA, and indeed all mechanical joint pain, why is there a failure of patients to participate in these important

aspects of daily care? NICE emphasises that muscle strengthening should come before increasing aerobic activity; telling physically weak people to go for a walk is not an effective strategy. A particular challenge in our ageing society is the reduction in frequency of exercise as people age, as reported by Healey et al.² Whether this problem reflects a failure of healthcare professionals to engage older patients in exercise therapy or a possible attitude among patients that 'my muscle weakness is just part of ageing' is unclear. We must educate our patients that only by getting strong and subsequently fit will their joint pain diminish in a sustainable way. Teaching a single exercise to patients with weak grip or weak quadriceps can take as little as a few minutes, and the analgesic benefits can be clear in just a few weeks of appropriate muscle strengthening, even in people aged >75 years⁸.

It would be wise to prevent or reduce muscle weakness through community interventions, as recommended in a recent tiered approach to physical activity supported by a range of important UK health providers⁸. This approach starts with accessible community facilities (like parks and swimming pools), then supervised physical programmes (such as aqua-aerobics or dance clubs), progressing through structured community-based rehabilitation programmes (that need not be supervised by clinicians). If people have problems despite accessing these tiers, individual programmes supervised by physical therapists will be required, but clinicians need to direct patients to these tiered activities first⁸.

The reported rates of dieting to lose weight (<10%) are not unexpectedly low, and it is not clear if this refers to being part of an effective, supervised diet programme. Being overweight is certainly a contributor to joint pain, with trials suggesting that 5-10% of bodyweight must be lost to achieve symptomatic benefits¹⁰. We have been spectacularly unsuccessful in Western societies in turning around the obesity epidemic and we need new strategies, bearing in mind the success and beneficial effect of government societal interventions that have reduced the prevalence of smoking, for example.

Even in the absence of new pharmacological therapies, there are things health care professionals can do better and quickly in line with NICE guidance. All practitioners who treat musculoskeletal problems should provide their patients with hardcopy or electronic exercise sheets and provide directions to appropriate web information on the nature and treatment of osteoarthritis. We must rebuff the view that joint pain is an inevitable part of ageing. We must promote muscle strengthening as a critical component of osteoarthritis care, no matter the age of the patient, and we must support our patients with guided activity plans to reduce the burden of joint pain.

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The author declares no competing interests

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