Arthritis Research UK

Promoting rheumatology that matters to the primary care community

Synovium

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Editorial

Guideline season in musculoskeletal medicine is here, with back pain, gout, fibromyalgia and most recently imaging in rheumatoid arthritis appearing on the editorial desktop.

New Canadian fibromyalgia guidelines were published online on 6 May and, with the subsequent online discussion, make interesting reading for GPs. The understanding of fibromyalgia has completely changed from a soft tissue disorder to a neuropathic condition with abnormalities in pain processing. We highlight some of the important points below.

And on the subject of completely new understandings how about antibiotics to treat low back pain!

Adrian Dunbar

Fibromyalgia – new guidelines

The new Canadian guidelines mentioned above confirm the clear message that fibromyalgia is a condition that should be diagnosed and treated in primary care. Only the most difficult cases should be referred to Rheumatology, say the rheumatologists.[1,2] With no reliable physical signs or lab tests, the diagnosis is based on the history. Greater awareness of fibromyalgia as a complex, multifaceted syndrome with chronic widespread pain, fatigue, poor-quality sleep, mood disorder and cognitive changes is advised. Investigations should be limited to FBC, ESR, CRP, CK and thyroid function. Patients should receive the clear message that there is, as yet, no cure for fibromyalgia. Symptoms fluctuate but rarely completely resolve. There is no single, uniformly and enduringly effective treatment. Management (not cure) should be multimodal and rehabilitative – targeting improved function. This might include medication, CBT and exercise therapy. Curiously there is a warning that 'fibromyalgia can be faked', especially in the presence of 'perverse incentives' such as welfare and insurance claims. Finally there is a warning that clinicians should avoid attributing fibromyalgia to any particular cause – injury, insult or illness – as this may have adverse consequences with respect to rehabilitation.

1. Fitzcharles MA, Ste-Marie PA, Pereira JX; Canadian Fibromyalgia Guidelines Committee. Fibromyalgia: evolving concepts over the past 2 decades. CMAJ 2013 May 15. [Epub ahead of print]

2. Fibromyalgia guidelines trigger changes for FPs. Medscape 2013 May 11. http://www.medscape.com/viewarticle/804011.

Gout – a bowl of cherries, sir?

The notion that consumption of cherries or cherry extract (which contain anthocyanins that have anti-inflammatory properties, and may also increase uric acid excretion) may help prevent episodes of gout has been around for some time. A recent paper from Boston offers early evidence to support this.[1] An online 'case-crossover' study followed 633 patients with gout for a year. Patients were asked to report acute episodes online and were questioned about their lifestyle with respect to risk factors, medications and cherry/cherry extract consumption in the preceding 2 days. They were asked the same questions at a time when they did not report an acute episode, effectively acting as their own controls. 1247 episodes of acute gout were reported. It was observed that consumption of cherries was associated with a 32% lower risk of acute gout. This increased to 45% if cherry extract was consumed and 75% in those also taking allopurinol. Allopurinol alone reduced the risk by 53%.

1. Zhang Y, Neogi T, Chen C, Chaisson C, Hunter DJ, Choi HK. Cherry consumption and decreased risk of recurrent gout attacks. Arthritis Rheum 2012 Dec;64(12):4004-11.

Antibiotics to treat low back pain

Understanding of peptic ulcer changed radically with the discovery of the role of *Helicobacter pylori*. The media have been buzzing recently proclaiming a similar landmark following the publication of two studies from Denmark on disc infection with skin bacteria: 'Millions ... could be cured by a simple and cheap course of antibiotics ... revolutionary ... the stuff of Nobel prizes.'[1] This clearly merits attention,

some scrutiny and more work to clarify and confirm. In the meantime we will attempt to provide a useful digest for when patients present to their GP asking whether antibiotics might be helpful for their back pain.

The first paper concerned infection of disc material and subsequent development of what is called Type 1 Modic change (MC – representing bone oedema) on subsequent MRI scan.[2] 61 patients undergoing surgical treatment for lumbar disc herniation had disc material sampled for culture. 28 patients (46%) had positive cultures – 26 with anaerobic and 2 with aerobic bacteria; 4 patients had both. In 86% of anaerobic cultures the skin commensal *Propionibacterium acnes* was isolated. Of the patients with anaerobic cultures 80% developed new MC in the vertebrae adjacent to the disc surgery on subsequent MRI. Neither of the patients with aerobic cultures developed MC. Of the 33 patients with negative cultures 40% developed new MC. MC on MRI occurs in 6% of the general population and in 30–40% of people with low back pain (LBP), usually in association with degenerative discs. The aetiology, natural history and clinical relevance of MC is much debated and this study adds an extra dimension to the debate.

The second paper describes an RCT in which 162 patients with chronic (>6 months) LBP after disc herniation, and new Type 1 MC on MRI, were treated with 100 days of antibiotics (a combination of amoxycillin and clavulanate) or placebo.[3] Multiple outcome measures were used. Subjects were assessed at 100 days and 1 year; 147 patients completed the study. There were some impressive reductions in pain, disability scores and time off work in the antibiotic group at 1 year compared with placebo. The volume of MC diminished in the antibiotic group but not the placebo group. The authors hypothesise that infection of intervertebral discs with *P. acnes* results in propionic acid diffusing into adjacent bone, causing oedema, pain and Type 1 MC on MRI. They are appropriately cautious in their statements about the widespread prescription of long-term (no – not 'simple') antibiotics to all patients with chronic LBP. This study only looked at patients with chronic LBP after disc herniation so the statement 'millions could be cured' might be over-optimistic! However this is a very interesting line of research and we look forward to reporting more developments.

1. Back pain 'can be cured with a £114 dose of antibiotics'. Metro 2013 May 7. http://metro.co.uk/2013/05/07/back-pain-can-be-cured-with-a-114-dose-of-antibiotics-3715780/.

2. Albert HB, Lambert P, Rollason J et al. Does nuclear tissue infected with bacteria following disc herniations lead to Modic changes in the adjacent vertebrae? Eur Spine J 2013 Apr;22(4):690–6.

3. Albert HB, Sorensen JS, Christensen BS, Manniche C. Antibiotic treatment in patients with chronic low back pain and vertebral bone edema (Modic type 1 changes): a double-blind randomized clinical controlled trial of efficacy. Eur Spine J 2013 Apr;22(4):697–707

MRI overuse in low back pain

Following the above revelations a Canadian study on the appropriateness of requests for MRI scanning for low back pain (LBP)[1] is interesting. 2000 referrals for MRI – 1000 for LBP and 1000 for headache, two of the commonest reasons for MRI requests – were examined by an expert panel for each problem and rated as inappropriate, an uncertain indication or appropriate. Only 44.3% of LBP requests were considered appropriate compared with 82.8% for headache; 27.2% were deemed of uncertain value (headache 8.2%) and 28.5% inappropriate (headache 9%). When the figures were analysed by referring clinician, family physicians performed the worst with only 33.9% of their LBP referrals considered appropriate. Referral decisions are always complex and subject to multiple influences but the contrast between the two clinical areas is striking and raises many questions.

An earlier study[2] looking at GP access to MRI for knee problems found that the only significant benefit that the MRI report brought to managing a case was increased clinician confidence. So do GPs lack confidence in dealing with LBP without imaging? And will enhanced awareness of potential disc infection be a confidence booster? Or will we see more requests for MRI scanning looking for Modic change? Interesting times.

Finally, the Summer 2013 issue of Hands On[3] will provide valuable advice for those wanting to know more about when – and when not – to use imaging for musculoskeletal problems in primary care.

1. Emery DJ, Shojania KG, Forster AJ, Mojaverian N, Feasby TE. Overuse of magnetic resonance imaging. JAMA Intern Med 2013 May 13;173(9):823-5.

2. DAMASK (Direct Access to Magnetic Resonance Imaging: Assessment for Suspect Knees) Trial Team. Influence of magnetic resonance of the knee on GPs' decisions: a randomised trial. Br J Gen Pract 2007 Aug;57(541):622-9.

3. Spratt JD. Musculoskeletal imaging for GPs. Reports on the Rheumatic Diseases (Series 7), Hands On 3, Arthritis Research UK, 2013 Summer.

New online MSK core skills training for GPs and GPSTs now available

Working with the Royal College of General Practitioners, Arthritis Research UK has funded and jointly developed a new training programme to improve GPs' and GPSTs' core skills in diagnosing and managing musculoskeletal conditions. You can find out more at:

www.elearning.rcgp.org.uk/msk.

New complementary therapies report

Arthritis Research UK's new report, *Practitioner-based complementary and alternative therapies for the treatment of rheumatoid arthritis, osteoarthritis, fibromyalgia and low back pain*, evaluating the effectiveness of a number of therapies, is available as a pdf on our website or as hard copy from:

0800 389 6692 or **info@arthritisresearchuk.org**.

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