

Osteopathy – a brief summary

Introduction

Osteopathy is a profession that has been regulated by statute since the passing of The Osteopath's Act (1993)¹. A new regulatory body, the General Osteopathic Council (GOsC)², was formed in 2000. Osteopaths practise throughout the UK and overseas; most osteopaths work in private practice but a growing number work within the National Health Service (NHS). Registration with the GOsC is renewed annually subject to certain requirements e.g. the retention of professional indemnity insurance, meeting mandatory continual professional development requirements, and the maintenance of high standards of professional practice.

Training

Osteopaths undergo four years training resulting in the award of BSc(Hons) Ost or BSc(Hons) Ost Med. Osteopaths who qualified before 1990 hold the award of Diploma in Osteopathy (DO). There are now eight osteopathic training establishments in the UK which have met RQ status. An increasing number of osteopaths are also undergoing postgraduate training for MSc, MRes and PhD awards.

Osteopathic practise

Osteopathic treatment employs a vast range of techniques and doesn't solely rely on the use spinal manipulation. Additional techniques include soft tissue work, spinal articulation, and appropriate exercise. A wide range of symptoms are treated in clinical practise; low back pain is the most common but pain to the cervical spine, shoulder joint, and knee joints are also very commonly presented. All other peripheral joints are treated and techniques are chosen so that they are suitable for a patient's symptoms, age, general health and morphology. Education relating to a patient's condition is also emphasised as part of their management to produce suitable coping strategies and prevent the recurrence of injury. Initial screening takes place at first consultation and referrals are made where patients are not suitable for osteopathic treatment.

Osteopathy and safety

A number of studies are currently being undertaken to investigate the incidence of adverse events related to osteopathy. Episodes of soreness after treatment are short lived (24 hours) and are commonly found in many other therapies using a "hands-on" approach³. Anecdotally the profession has enjoyed an extremely safe reputation since it uses less high velocity manipulation than other professions. The use of such high velocity manipulation techniques to the cervical spine has contributed to incidents of

adverse events which have been reported by other manual therapy professions. The studies currently being undertaken for osteopathy are collaborative projects between osteopathic educational institutions and experienced researchers from Barts and The London, the University of Warwick and the University of Brighton. One of the studies looking at adverse events associated with physical interventions in osteopathy and other manual therapies has just been completed and papers are currently being submitted for publication. Further information concerning the studies can be found at www.brighton.ac.uk/ncor/research_opps/index.htm.

Osteopathy and Research

Research in osteopathy has taken place over a number of years but in an informal manner. In 2003, the National Council for Osteopathic Research (NCOR) was formed and is based at the University of Brighton under the direction of Professor Ann Moore, Professor of Physiotherapy. NCOR is involved in a number of projects including:

- The creation of a searchable online database of published osteopathic research
- The creation of a database of unpublished research
- The development of a standardised data collection tool for osteopaths
- The development of a network of research groups (hubs) throughout the UK each of which are involved in pilot studies examining different areas of practice
- The creation of a Research Governance Framework for osteopaths

Clinical Guidelines for Low Back Pain

The European back pain guidelines (www.backpaineurope.org) suggest "consideration of referral for spinal manipulation for patients with acute low back pain who are failing to return to normal activities" and "short courses of manipulation/mobilisation can also be considered" for chronic low back pain patients.

Acute back pain guidelines can be found at:

www.backpaineurope.org/web/html/wg1_results.html.

Chronic back pain guidelines can be found at:

www.backpaineurope.org/web/html/wg2_results.html.

The Clinical Standards Advisory Group (CSAG)⁴ produced clinical guidelines for the management of acute low back pain in 1996 which produced guidance on diagnostic triage, and principal recommendations for treatment based on evidence in this area. Manipulation was recommended "within the first six weeks of the occurrence of symptoms for patients who need additional help with pain relief or who are failing to return to normal activities".

This work was followed by advice concerning the use of osteopathic care/spinal manipulation and can be found in the Musculoskeletal Services Framework.

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4138413.

The National Institute for Health and Clinical Excellence (NICE) has recently reviewed the evidence looking at the acute management of chronic non-specific low back pain; this looks specifically at back pain that has lasted longer than six weeks but not more than thirteen months. The consultative process began in 2008 and guidelines were produced in May 2009. The guidelines have produced information concerning a variety of different treatments and approaches for patients with non-specific low back pain. This includes up to 9 sessions of manual therapy treatment which includes osteopathy. Further information concerning the guidelines can be found at <http://www.nice.org.uk/CG88>.

Evidence for osteopathy - Low back pain.

Low back pain is the symptom for which the highest numbers of patients consult osteopaths⁵. Commentators have recorded the view that for acute, uncomplicated low back pain “osteopathy and chiropractic were rated as effective by most experts”⁶. Research into the management of back pain has concentrated more on acute than chronic conditions. A series of studies are summarised in turn with their complete references.

Gurry B, Hopkins M, Peers C, Anderson S and Watts M. A rapid access treatment facility for acute low back pain based in the primary care setting. *J Orthop Med*. 2004;26(1):13-19.

This study looked at a multidisciplinary setting within Plymouth Primary Care Trust (PCT). It found that the return to work time was quicker using this service which included osteopaths than GP and physiotherapy services alone. An audit of the service revealed that 84% of patients with low back pain can be managed without the need for hospital referral; this represents a considerable saving for the PCT.

In 2004, funding was awarded by the Medical Research Council for the United Kingdom Back Pain, Exercise and Manipulation (UK BEAM) randomised trial⁷. This looked at how a package of care involving one or a combination of treatment approaches could improve low back pain in patients. The study’s authors concluded that the combination of spinal manipulation and exercise was more beneficial than when the treatments were used in isolation, and when compared to “best care” offered through general practice. An economic evaluation⁸ was made for this study and this concluded that adding spinal manipulation to “best care” was a cost effective way to manage back pain in general practice.

Licciardone JC, Brimhall AK, King LN. Osteopathic manipulative treatment (OMT) for low back pain: a systematic review and meta-analysis of randomized controlled trials. *BMC Musculoskeletal disorders*. 2005; 4(6):43.

A meta-analysis is a research method that pools and examines the data from a number of high quality studies and analyses that data using a number of different statistical methods. The author of this study has concluded from this meta-analysis that OMT significantly reduces low back pain. The level of pain reduction is greater than expected from placebo effects alone and persists for at least three months. Additional research is warranted to elucidate mechanistically how OMT exerts its effects, to

determine if OMT's benefits are long lasting, and to assess the cost-effectiveness of OMT as a complementary treatment for low back pain.

Williams NH, Wilkinson C, Russell I, Edwards RT, Hibbs R, Linck P and Muntz R. Randomized Osteopathic Manipulation Study (ROMANS): pragmatic trial for spinal pain in primary care. *Fam Pract.* 2003;20(6):662-9.

The study's authors concluded that a primary care osteopathy clinic improved short-term physical and longer term psychological outcomes, at little extra cost to normal GP care. Rigorous multicentre studies are now needed to assess the generalisability of this approach. Further work has been undertaken by Williams *et al* looking specifically at the psychological outcomes associated with spinal manipulation. The most important risk factors for neck and back pain are psychosocial but systematic reviews in this area have focussed exclusively on pain and spine-related disability. Williams' systematic review has shown that there was some evidence that spinal manipulation improved psychological outcomes compared with verbal interventions⁹.

Williams NH, Edwards RT, Linck P *et al*. Cost-utility analysis of osteopathy in primary care: results from a pragmatic randomized controlled trial. *Fam Pract.* 2004;21(6):643-50.

The authors concluded that a primary care osteopathy clinic may be a cost-effective addition to usual general practice (GP) care. A relative improvement in the mean quality-adjusted life-years (QALYs) for the osteopathy treatment group versus usual GP practice care was noted. This was associated with a small increase in mean health service costs. However, this conclusion was subject to considerable random error and a larger scale study will be required to further investigate the economic benefits.

Licciardone JC, Stoll ST, Fulda KG, Russo DP, Sui J, Winn W and Swift J. Osteopathic manipulative treatment for chronic low back pain: a randomized controlled trial. *Spine.* 2003 Jul;28(13):1355-62.

The authors concluded that osteopathic manipulative treatment and sham manipulation both appear to provide some benefits when used in addition to usual care for the treatment of chronic nonspecific low back pain. It remains unclear whether the benefits of osteopathic manipulative treatment can be attributed to the manipulative techniques themselves or whether they are related to other aspects of osteopathic manipulative treatment, such as range of motion activities or time spent interacting with patients, which may represent placebo effects.

Macdonald R.S., Bell C.M.J. An Open Controlled Assessment of Osteopathic Manipulation in Non-Specific Low Back Pain. *Spine.* 1990; 15 (5): 364-70. Erratum in *Spine* 1991 Jan;16(1):104.

This was a pilot trial of 100 patients who were randomised between osteopathic treatment with management advice, and management advice only as the control. Osteopathic treatment showed 50% recovered at the two week period compared with 22% for the control, but the difference had reduced by the 12 week period.

Burton AK, Tillotson KM, Cleary J. Single-blind randomized controlled trial of chemonucleolysis and manipulation in the treatment of symptomatic lumbar disc herniation. *European Spine Journal.* 2000; 9:202-7.

Manipulation produced a statistically significant greater improvement for back pain and disability in the first few weeks. It also produced a 12-month outcome that was equivalent to chemonucleolysis: it can be considered as an option for the treatment of symptomatic lumbar disc herniation, at least in the absence of clear indications for surgery.

Pringle M., Tyreman S. Study of 500 Patients attending an Osteopathy Practice. *British Journal of General Practice*. 1993;43(366):15-8.

This study examined the characteristics of patients as they presented in the GP practice, their experiences, diagnostic groups and outcomes. The most useful findings were that patients with 'spinal joint strain' responded best and those with spondylotic changes responded worst within the groups identified. Acute patients fared better than those with chronic symptoms. Patients who visited their GP prior to the osteopath suffered more symptoms for longer than those who consulted the osteopath first.

Cervical spine

Pain to the cervical spine and headache are frequent presentations in osteopathic practice. The review by the Cochrane Collaboration investigated the use of manipulation in the treatment of headache.

Bronfort G, Nilsson N, Haas M, Evans R, Goldsmith CH, Assendelft WJJ, Bouter LM. Non-invasive physical treatments for chronic/recurrent headache. *Cochrane Database of Systematic Reviews* 2004, Issue 3. Art. No.: CD001878. DOI: 10.1002/14651858.CD001878.pub2. The review concluded that a few non-invasive physical treatments may be effective as prophylactic treatments for chronic/recurrent headaches. Based on trial results, these treatments appear to be associated with little risk of serious adverse effects. The clinical effectiveness and cost-effectiveness of non-invasive physical treatments require further research using scientifically rigorous methods.

Patient satisfaction studies

Studies of patient satisfaction with osteopathy have been undertaken in a range of different settings. These settings have included osteopathic clinics attached to osteopathic educational institutions (OEI), and osteopathic services provided on GP premises.

The study within the OEI was a descriptive and exploratory investigation of patient satisfaction and perceptions of treatment. The majority of patients expressed satisfaction with treatment, the explanations they received and their perceived health outcomes¹⁰. Chronic low back patients reported their satisfaction with the treatment they received for back pain from GPs and osteopaths practising in the same surgery. Although levels of satisfaction were high for all treatments, patients reported significantly higher scores for satisfaction with the osteopathic treatment¹¹.

Further work

All osteopaths recognise that further research into clinical practice is required to examine practice for the ultimate benefit of patients. The creation of an infrastructure for osteopathic research in 2003 will contribute to this. The lack of provision of funding to undertake more research remains a significant obstacle for osteopathy. The General Osteopathic Council, fulfilling its remit of acting in the best interests of

patients is currently funding work looking into patient expectations of osteopathic care, under the direction of Dr Janine Leach. The importance of focussing on patient care is in accordance with the recommendations of the recent report by Lord Darzi¹².

References

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Further information.

Further information concerning osteopathic research can be found on the NCOR website www.ncor.org.uk or by contacting the NCOR Research Officer, Carol Fawkes, Clinical Research Centre for Health Professions, Aldro Building, University of Brighton, 49, Darley Road, Eastbourne, East Sussex, BN20 7UR. Telephone: 01273 643457 or email: c.a.fawkes@brighton.ac.uk.