

# Will aromatherapy be a useful treatment strategy for people with multiple sclerosis who experience pain?

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**This paper outlines the use of massage and aromatherapy for pain management and how it might work, concentrating specifically on patients with multiple sclerosis who have long-standing pain. The services currently offered to these patients are discussed to include the assessment procedure, the treatments undertaken and the range of essential oils used. The review procedure, and continuation of the treatments are also outlined with a brief summary of audit results being presented. Plans for future service development and research are also proposed. © 2002 Published by Elsevier Science Ltd.**

## INTRODUCTION

There has been an increase in use of complementary therapies for pain-related problems such as arthritis (Rao et al. 1999). In a study by Astin (1998), 35% of respondents who used complementary therapies used them to treat chronic pain problems. Pain clinics tend to deal with individuals who have chronic pain, this needs to be differentiated from acute pain that is transient, has an identifiable cause and is usually time limited with a cure at the end of it. Chronic pain is long standing in nature, it does not have a foreseeable end and it is not uncommon for no identifiable cause to be found for the pain. The impact that chronic pain has on individuals, their partners, families and friends is huge. It can lead to the loss of employment, financial problems, social withdrawal, loss of self-worth, a feeling of not belonging, and often depression (Hanson & Gerber 1990, Wall 1999). Aromatherapy can be used for both acute and chronic pain management but this paper specifically considers its use for the management of chronic pain experienced by patients with multiple sclerosis (MS). An

overview of MS, aromatherapy and pain, in general, will be given followed by its current use in a multidisciplinary MS clinic with plans for future research and service development.

## AROMATHERAPY AND PAIN MANAGEMENT

Aromatherapy is the controlled use of essential oils to promote health and well-being (Price 1993). The use of essential oils for pain management has become a more common and accepted form of treatment (Horrigan 1995). The most frequent form of using the essential oils is through massage; however, essential oil can be used in a variety of other ways such as inhalation, vaporisation, in the bath and through a compress. Few studies comparing the benefits of massage with essential oils to that of massage with just a carrier oil have been undertaken and those that have are often methodologically flawed.

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## MULTIPLE SCLEROSIS

Multiple sclerosis (MS) is a neurological condition that affects predominantly young people. An estimated 50,000–70,000 people have the disease in the United Kingdom (Beard et al. 2000). It is characterised by patches of inflammation and myelin loss in the central nervous system causing a variety of neurological signs and symptoms. The progression of MS is often remittent but ultimately progressive causing disability, and leading to death on average 10 years before it would have normally occurred (Richards et al. 1996). Pain is experienced by up to 75% of those with MS (Kassirer & Osterberg 1987) and is just one of many potential unpleasant symptoms caused by the disease including bowel and bladder problems, fatigue, visual disturbances and spasms. The experience of pain in MS is poorly represented in both medical and nursing literature and little research has been undertaken specifically into it.

Patients with MS who experience pain often have to deal with this alongside other symptoms. Their ability to cope with their pain in these circumstances may, therefore, be diminished due to having to cope with other symptoms and the stress and worry about having the diagnosis of a chronic neurological condition.

The cause of the pain experienced by people with MS may be from neuronal damage or from musculo-skeletal problems resulting from disability associated with the MS. In an exploratory study undertaken to establish the prevalence of pain in MS, 72.5% of patients who responded to a postal questionnaire reported pain (Howarth 2000). One of the alarming findings from this study was the undertreatment of people's pain. This was due to a combination of reasons but primarily because patients either believed that it was part of their MS or because patients' General Practitioners told them that nothing could be done and they had to get on and live with it. In the study, patients were asked to list symptoms that they experienced due to their MS and they were then asked to rank these in order of how much distress the individual symptoms caused. Of the 316 people who reported pain, 35% recorded it as the symptom that caused them most concern. This was second only to mobility (36%). These figures begin to illustrate the impact of the problem of pain in MS.

Of those who had responded to the questionnaire, 57 (18%) had tried aromatherapy for their pain. Of these, 49% found that it helped 'a lot' or 'moderately'. Only 19% found no benefit from it at all.

Pain due to MS is usually chronic in nature and often cannot be fully relieved but as with any chronic pain, management strategies can be

utilised to help people reduce their pain to a manageable level whilst helping them to cope with it. Beliefs that nothing can be done about chronic pain in MS are unfounded and may lead people to go on experiencing pain and suffering unnecessarily. Conventional pain management techniques such as medication and nerve blocks may not be successful in patients with MS. This may then lead people to consider complementary therapies

### Aromatherapy massage

Massage is thought to be of benefit for pain for a variety of reasons. It is thought to stimulate afferent nerve fibres that reduce the transmission of pain impulses. Pain, however, is a complex multidimensional phenomenon that impacts on individual's bio-psychosocial and spiritual well-being. It may be that the massage also has some benefits on these aspects of long-standing pain problems. Studies by Sato et al. (1997) and Kurosawa et al. (1982) found that massage caused a reduction in stress levels. It is thought that massage stimulates the production of stress-relieving hormones, e.g. cortisol, and animal studies have found that massage can reduce blood pressure whilst increasing pain thresholds (Lund et al. 1999).

Aromatherapy massage is well documented as being used for the treatment of a variety of painful conditions such as in palliative care settings (Wilkinson 1995) and in labour (Burns et al. 2000); however, reports of its use for chronic pain conditions are sparse. Brownfield (1998) studied nine patients with rheumatoid arthritis and found that although quantitative outcome measures in the form of visual analogue scores did not alter, patients reported less pain, improved sleep and improved well-being along with a reduction in analgesic consumption after massage with lavender oil. An anecdotal report by Barber (1996) of one patient with fibromyalgia supports these findings. These two papers highlight one of the main problems of research that has been undertaken in aromatherapy for pain management and that is small sample sizes.

Certain essential oils have been found to have specific analgesic properties. These include white birch (Lawless 1992) and lavender and roman chamomile (Price & Price 1995) which have high terpene and ester constituents. This combined with the effects that an aroma can have on the limbic system supports the use of aromatherapy for pain. When aromatherapy oils are inhaled molecules are transferred from the olfactory system to the limbic system. Emotional responses can therefore, be triggered by inhalation of essential oils that can result in the release of relaxing and sedative neuro-chemicals. This

alongside the analgesic and anti-inflammatory effects of the essential oils may be beneficial to patients with MS and pain in helping both their pain and their emotional status in view of having MS and its associated problems.

### **AROMATHERAPY AND MULTIPLE SCLEROSIS**

One of the treatment strategies utilised in the multidisciplinary pain clinic at the Royal Hallamshire Hospital in Sheffield for the management of chronic pain is aromatherapy massage. This has been carried out at the clinic for the last 7 years with a considerable degree of success. The use of aromatherapy oils through massage does not get rid of the pain problem but offers patients an alternative form of treatment that can provide them with some symptomatic relief whilst helping them with sleep, relaxation, the mobility of joints and muscles, and an improved feeling of well-being.

#### **Assessment**

A clinical nurse specialist in pain management takes patients through a thorough pain assessment process in the multidisciplinary MS clinic. If at this assessment, aromatherapy is felt to be a suitable form of treatment, then a series of four appointments spaced at monthly intervals are made. The frequency of the appointments is not ideal, weekly or fortnightly sessions would be more suitable; however, resource limitations currently do not permit this. To try and alleviate the gap between appointments, patients are offered the opportunity to take lotion or oil home to use in between these treatments. On completion of the course of treatments, if patients feel that the aromatherapy massage has helped them, then they are asked to bring in a relative/carer who can be taught how to undertake simple massage. This allows the patient to have the massage at home whenever they feel they need it without becoming dependent on the hospital for input. It also avoids an accumulation of patients requiring treatments which has obvious implications on waiting times for other patients.

When patients are referred for aromatherapy they are advised that the treatment is not a cure for their pain or any underlying medical condition. It is promoted as a management strategy that will help them to cope with their pain and give them back a degree of control over the symptoms they are experiencing. A full history of the pain and associated problems is taken so that a holistic approach can be taken when choosing essential oils.

#### **Treatments**

Due to time constraints, a full-body massage cannot be undertaken, hence relevant areas are massaged in an appointment lasting up to 1 hour. The massage used is gentle effleurage as often this is all the patients are physically able to tolerate. The most common areas massaged in patients with chronic pain tend to be the back, neck, shoulders and legs. Patients embark on a course of four treatments spaced at monthly intervals. The massage is undertaken in a quiet room with the pain clinic. They are offered the opportunity to take home a blend of massage oil and the essential oils used in the clinic for home use either topically or in the bath. The carrier oil of choice is grape-seed as it is cheap and non-greasy compared to other carrier oils and relatively odour free. Essential oils are chosen for their analgesic and anti-inflammatory properties whilst taking into consideration patient's preference for aroma, their medication and any other underlying medical conditions. Once patients have completed the course of treatments a review is undertaken to check the effect that the aromatherapy massage has had on the patients sleep, ability to relax, joint and muscle mobility, medication consumption and overall feeling of well-being. If the aromatherapy massage improves one or more of these areas, then patients are more likely to be able to cope with the ongoing process and impact of chronic pain.

#### **Audit**

An annual audit is undertaken of the patients who commence a course of aromatherapy. This provides basic statistics on the numbers seen, areas massaged and the perceived benefits as reported by the patients of aromatherapy. Due to the variety and different combinations of oils used for different patients no attempt is made to establish which oils are most effective. The most recent audit figures available are presented below. Between August 1999 and August 2000, 50 patients were seen for aromatherapy massage in the pain clinic, 41 (82%) were women and 9 (18%) were men. The age range varied from 26 to 88 years with the mean being 51 years.

The areas massaged are mentioned in Table 1.

The improvements following the massage are tabulated in Table 2.

After the review, 78% of both the men and the women chose to continue using aromatherapy in some form, this either involved attending the clinic for further massage sessions spaced less frequently over a period of time or using the treatment at home either through the use of essential oils in the bath or by teaching partners/family/friend to do the massage for the patient at home. The audit figures have provided evidence

**Table 1** Areas massaged

Area massaged	Male	Female	Overall
Back and neck	5 (10%)	18 (36%)	23 (46%)
Back, and neck and legs	1 (2%)	3 (6%)	4 (8%)
Back and legs	2 (4%)	17 (34%)	19 (38%)
Back, arms and legs	—	2 (4%)	2 (4%)
Arms and legs	—	2 (4%)	2 (4%)

**Table 2** Improvements following the massage

Indicator	Male (%)	Female (%)	Overall (%)
Improved sleep pattern	63	47	55
Improved mobility	69	60	64
Improved overall feeling of well-being	100	74	88
Reduced medication consumption	—	7	7
Improved ability to relax	100	82	91

that supports the service currently offered and have contributed to the service being allowed to run for the last 7 years.

### Future plans

As with pain in MS, aromatherapy, has been under-researched. A qualitative study is, therefore, being planned to evaluate the efficacy of the use of aromatherapy in the management of pain in MS. If the study evaluates in favour of the use of aromatherapy in the management of pain in MS, then it is hoped that this will provide the basis for a case to increase the time commitment currently given to aromatherapy in the pain clinic. This will mean that the frequency of massages can be increased so that patients do not have to wait so long between their treatments.

### CONCLUSION

Aromatherapy massage has the potential to provide an effective management strategy for chronic pain in patients with MS. Much of the current evidence is anecdotal but overall an emerging theme is becoming apparent. Although aromatherapy will not cure the problem or get rid of the pain, it may help improve some of the effects of the pain such as sleep disturbance, joint and muscle mobility, whilst helping people to relax and feel better. In achieving one or more of these things, patients appear to be able to cope better on a day-to-day basis. In a National Health Service, where we are increasingly

required to provide evidence for practices we undertake, more research into this field is required. In doing so, we can argue the case for an increase in the use of such therapies to offer to patients with distressing debilitating conditions such as chronic pain and multiple sclerosis.

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