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Use of aromatherapy (with or without hypnosis) in the treatment of intractable epilepsy—a two-year follow-up study

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We have been trying the effect of aromatherapy (with or without hypnosis) in patients with intractable epilepsy who ask for it. This is a report of the first 100 patients to try the treatment, followed up for at least two years after the treatment ended.

It is important to remember that this was a treatment for people who had asked for it and for whom time and a therapist was available. It was not a controlled trial but was carried out when we could and at a time when we were experimenting with the best way of using it. Results must therefore be treated with caution and with due regard to other therapeutic factors that may be implicated in the results, both good and bad. We assume that the result (with over a third of the patients using aromatherapy with or without hypnosis becoming seizure free for at least a year) as being the best that could be achieved and likely to be less in a properly controlled trial. Of the three treatments tried (aromatherapy on its own, aromatherapy plus hypnosis and hypnosis without aromatherapy), aromatherapy plus hypnosis seems to have had the best and most lasting effect (a third of patients still seizure free at two years), but was the most labour intensive and needed medical therapist input. Aromatherapy itself might be best reserved as a short-term treatment for people going through a bad time with their seizures. A fuller and more lasting effect may be obtained with aromatherapy plus hypnosis, but this needs a patient who is prepared to put much time and personal effort into the treatment.

Key words: aromatherapy; hypnosis; intractable epilepsy.

INTRODUCTION

Aromatherapy is an alternative or complementary therapy. In the United Kingdom, it is used by people trained in the technique who are not usually qualified in anything else and is a massage therapy with essential oils, mainly used as an alternative or complementary treatment for stress-related symptoms[1,2]. It is however being increasingly used as a complementary therapy in certain medical conditions, particularly cancer and in old age units, mainly by nurses. In other European countries, it is more widely used by therapists who have a medical qualification[1,2] and oils are often used neat and taken internally (or used rectally or vaginally).

Aromatic oils used in aromatherapy are usually diluted in a bland oil for external massage. Different oils are said to have different properties. Used as part of a massage, the oil in question, being aromatic, is absorbed through the skin and elements of it rapidly travel to internal organs (because of a first pass effect), particularly the brain: some absorption is also likely through the olfactory system as the patient can also smell the oil, which means brain entry. Different oils have different chemical constituents (although there is much overlap) and are said to have different uses and properties. It is important, if consistency is needed in effect, to endeavour to use an oil derived from the same country and source: the same oil but obtained from different countries or sites may vary widely in its constituents but even oils of different years, but the same site, may be different in what they contain[3]. Most oils in therapeutic use are unlikely to be harmful, used in small quantities diluted in a carrier oil for massage[3], but some oils are better avoided by people with epilepsy if they contain much camphor,

which is convulsant[3,4]. Most aromatherapists use a mixture of aromatic oils in small quantities in massage, although we have always used a single oil well diluted, different patients choosing different oils because the particular odour of the oil is liked by the individual. For us the aroma is important and we try to keep it as constant as possible.

We can only describe smell, the most primitive of the senses, in a general way (for example, like or unlike something else) as smell reception and interpretation is confined to more primitive brain regions[5], which are however often the seat of epilepsy[6]. Smell in the human, unlike in animals, is relatively unimportant. It is however perhaps because of its primitive 'old brain' nature, easily conditioned: a conditioning difficult to remove once established (and established sometimes with 'one trial learning')[7]. Such learning is best conditioned when associated with an emotional event or experience[8,9]. In humankind, women are better at this kind of memory reinforcement than men and have more olfactory experiences[8].

Various countermeasures have been interposed between warning of an oncoming seizure and its actual arrival since earliest times, although smell has been little used (despite the presence and acknowledgement of olfactory auras). The only common olfactory stimulus used in epilepsy was the unpleasant practice of using burning hartshorn under the nose to stop a seizure: a practice that persisted for hundreds of years[10], although it was also used for non-epileptic seizures as well.

Efron in 1957[11] showed that an aroma (of jasmine) could be used as a countermeasure to prevent an oncoming seizure: eventually (in what was a rather unnecessarily complicated regime) the memory of the smell of jasmine (very distinctive) was enough to stop the seizure: similar as we shall see, to the experience of our patients. Although only a single case study, the method promised much but was not used extensively until we tried it.

Some years ago now a temporary team member was training formally in aromatherapy to obtain a professional qualification and asked if she could experiment with the technique in people with epilepsy. After some thought and discussion agreement was reached and a pilot study was carried out with 10 patients (Table 1). Only cheaper oils were used (chosen by the patient) and it was stipulated that a single oil would be used (this stipulation arose out of a desire to see if different oils had different effects, but it is one that we have serendipitously stuck to since: we can now afford the expensive oils like jasmine). She was also asked to train two team members in the technique. Ten volunteers with epilepsy had two full body massages with their chosen oil, one month apart: seizure frequency was measured for the month before the massage, the month after the massage and six months later (Table 1). All patients had proven epilepsy, mostly complex partial seizures with secondarily generalised tonic–clonic attacks.

The results of this pilot study were encouraging, although effects were transient in all but one patient. But there were also problems. What was the beneficial result due to? Why did it wear off? Was it due to a pharmacological effect of the oil(s)? Was it due to a (transient) decrease in arousal (reduction in stress is known to reduce seizures)[12]? Placebo and general treatment effects were probably important: could the aroma of the oil also have been important?

There are problems with using aromatherapy in a clinical setting, particularly providing a quiet setting for an hour of uninterrupted full body massage. Could we simplify the technique so that more patients could use it? Could we get the beneficial effect to be maintained for longer than a month? Efron's 1957 paper[11] gave us the idea of trying to use the aroma of the oil as a countermeasure against an oncoming seizure, so we tried in various ways to develop a conditioned response, which, since it was olfactory, might be long-lasting. Over the next 10 years we tried various approaches.

It must be emphasised that this was not done in a systematic or blinded way: but more as time, personnel, funds and opportunity permitted. We tried to accommodate those patients who requested trying it (unless we thought there was a good reason not to or that a modest change in their anticonvulsant regimen would be sufficient) and we sometimes suggested it to patients in whom we thought it might be helpful, if facilities were available. All patients reported in this study were shown clinically to have epilepsy: the diagnosis was not in doubt.

Table 1: First experiment in using aromatherapy in 10 patients with partial onset epilepsy.

	Month before treatment	During treatment month	Month after treatment	Six months after treatment
Mean seizure frequency	7 (3–12)	2 (0–27)	3 (0–18)	6 (0–13)
Oils chosen		Ylang Ylang (6), rosemary (1)[a]	Lavender (1), rose geranium (1)	Camomile (1)

[a] Seizure increase.