

Arthritis and Migraine Aromatherapy Formulations with No Side Effects

Omprakash H Nautiyal*

Department of Organic Chemistry, Haramaya University, Ethiopia

*Corresponding Author: Omprakash H Nautiyal, Professor and Researcher, 102, Shubh Building, Shivalik II, Canal Road, Chhani Jakat Naka, Vadodara 390024, Gujarat, India.

Received: November 17, 2014; Published: December 22, 2014

Abstract

Aromatherapy since ancient time has been revealed to combat various ailments either by olfactory route and absorption route for various diseases. Formulations were developed employing pure essential oils in v/v in vehicle which are specifically vegetables oils and may be utilized on the basis of applications of ailments. Many patients were treated with such formulations and reported to have comfort of healing. Arthritis formulation after application was found to have onset results within 10-15 minutes. Migraine formulations that contain essential oils whose constituents are subtle to be absorbed by the skin and being getting mixed in the blood provide enormous relief and sound sleep resulted. Though many physicians have studied the result of aromatherapy with the help of Electroencephalography (EEG) and Electrocardiography (ECG) and have found to report the complete hormonal balance. Some of the most modern sophisticated equipments may help further to evaluate the exact mechanism of working of essential oils for many psychological problems as is the severe concern for the society due to life style, food style, environment, pollution, water contamination, fruit contamination, smoking, alcoholism and various addictions. Some of the formulations developed have revealed to suppress the burns with the excellent soothing and prevent further inflammations and skin degeneration. Studies with the scientific attitude in combination with medical science attitude may be highly beneficial for the entire world populations. Many of the essential oils have been exploited for their microbiological inhibition studies. For arthritis the formulation contains 40% v/v and 60% v/v essential oils and vehicles utilized amongst Sesame oil, Mustard oil and Olive oil and/or apricot oil. For migraine the formulation contained 15-20% v/v and 80-85% essential oils and vehicles as mentioned earlier. Patients treated with the therapy claimed to be comfortable with the treatments.

Keywords: Essential oils; Vehicles; Doses; Arthritis; Migraines

Introduction

Essential oils contain active agents that can have potent physical effects. Basic aromatherapy home treatments can be self-administered, medical aromatherapy and must always be performed under the guidance of an aroma therapist, herbalist, massage therapist, nurse, or physician. The most basic method of administering aromatherapy is direct or indirect inhalation of essential oils. Inhalation of several drops of an essential oil to a tissue or handkerchief brings great relief. Adequate amount of essential oil can also be poured to a bowl of hot water and used as a steam treatment. This recommendation is to treat respiratory and/or skin conditions. Steam devices for aromatherapy may be availed commercially. A warm bath is also recommended containing essential oils; it can have the same effect as steam aromatherapy for the promotion of relaxation. Water should be lukewarm used in a bath rather than hot to slow the evaporation of the oil and beneficial effects [1,2].

Dispersion of an essential oil over a large area may be facilitated employing diffusers, vaporizers, and light bulb rings. Promotion of healthier home environment could be particularly effective with the employment of these devices. For instance, eucalyptus and tea tree oil are known for their antiseptic qualities and are frequently used to make hygienic of sickrooms, and citronella and geranium can be useful in repelling insects. Considering the potency of essential oils they may be diluted in a carrier oil or lotion before being applied to the skin to prevent an allergic skin reaction. Over large lists of the carrier oil few may be suggested as vegetable or olive oil, such as wheat germ or avocado. Light oils, such as safflower, sweet almond, grape seed, hazelnut, apricot seed, or peach kernel, may be absorbed more easily by the skin. From aroma therapist point of view, standard dilutions of essential oils in carrier oils range from 2-10%. Nevertheless, some oils can be used at higher concentrations, and others suggested to be diluted further for safe and effective use. The type of carrier oil used and the therapeutic use of the application may also influence how the essential oil is mixed. Individuals advised seeking guidance from a healthcare professional and/or aroma therapist when diluting essential oils [1,2].

Many of us probably already use essential oils in our daily lives. Most toothpastes and mouth washes contain essential oils, as do some personal care products and perfumes. There are even some baked goods that are made with essential oils. Aromatherapy, however, refers to the therapeutic use of essential oils and hydrosols for health purposes. Since aromatherapy uses essences derived from plants, it is a botanical therapy, or plant therapy. Other examples of botanical therapeutics include homeopathic remedies, herbal preparations, and flower remedies. When essential oils are used for health applications, a blend of oils is often more effective than using any single oil alone. Some oils, when combined, complement and enhance each other to create a "synergy" with one another. Conversely, improperly chosen oils can work against each other when blended, so it is best to thoroughly research the oils before making therapeutic blends. Many oils gives a distinct first impression and can be easily classified with a general descriptor, such as "woody," "floral," "spicy," or other such broad fragrance category. Aromas that have similar fragrance impressions usually blend well with each other. For example, rose (*Rosa damascena*), jasmine (*Jasminum officinale*), and lavender (*Lavendula officinalis*) are all floral oils, and thus blend nicely [1,2].

Blending and studying the aromatic qualities of essential oils is an excellent way to become acquainted with the oils. It is unfortunate that essential oils are often diluted, extended, cut, or otherwise altered. Only pure, natural essential oils should be used for wellness or health purposes. Before buying essential oils, question the seller about his/her supplier. You may want to ask the seller if he/she has the oils tested by an independent lab using Gas Chromatography/Mass Spectrometry (GC/MS) to verify their purity and authenticity. Those sellers who have close communication with their suppliers, and have their oils tested, will be more likely to provide a pure product. Essential oils degrade plastic materials, and should be sold and stored only in glass containers. In addition, the glass containers should be dark usually amber or cobalt since light will damage essential oils. Since each essential oil has its own unique therapeutic properties and safety precautions, and these can vary widely from oil to oil, it's important to identify the oil by its botanical (Latin) name in addition to its "common" name [3,4].

Essential oils commonly used in aromatherapy treatment include:

- 1. Roman chamomile (*Chamaemelum nobilis*). An anti-inflammatory and analgesic. Useful in treating otitis media (earache), skin conditions, menstrual pains, and depression.
- 2. Clary sage (*Salvia sclarea*). This natural astringent is not only used to treat oily hair and skin, but is also said to be useful in regulating the menstrual cycle, improving mood, and controlling high blood pressure. Clary sage should not be used by pregnant women.
- 3. Lavender (*Lavandula officinalis*). Popular aromatherapy oil which mixes well with most essential oils, lavender has a wide range of medicinal and cosmetic applications, including treatment of insect bites, burns, respiratory infections, intestinal discomfort, nausea, migraine, insomnia, depression, and stress.
- 4. Myrtle (*Myrtus communis*). Myrtle is a fungicide, disinfectant, and antibacterial. It is often used in steam aromatherapy treatments to alleviate the symptoms of whooping cough, bronchitis, and other respiratory infections.
- 5. Neroli (bitter orange), (*Citrus aurantium*). Citrus oil extracted from bitter orange flower and peel and used to treat sore throat, insomnia, and stress and anxiety-related conditions.

- 6. Sweet orange (*Citrus sinensis*). An essential oil used to treat stomach complaints and known for its reported ability to lift the mood while relieving stress.
- 7. Peppermint (*Mentha piperita*). Relaxes and soothes the stomach muscles and gastrointestinal tract. Peppermint's actions as an anti-inflammatory, antiseptic, and antimicrobial also make it an effective skin treatment, and useful in fighting cold and flu symptoms.
- 8. Rosemary (*Rosmarinus officinalis*). Stimulating essential oil used to treat muscular and rheumatic complaints, as well as low blood pressure, gastrointestinal problems, and headaches.
- 9. Tea tree (*Melaleuca alternifolia*). Have bactericidal, virucidal, fungicidal, and anti-inflammatory properties that make it a good choice for fighting infection. Recommended for treating sore throat and respiratory infections, vaginal and bladder infections, wounds, and a variety of skin conditions.
- 10. Ylang ylang (Cananga odorata). A sedative essential oil sometimes used to treat hypertension and tachycardia.

The purpose of this study was to bring up the knowledge amongst the ailment sufferer of arthritis and migraine that it may be efficiently worked as an alternative medicinal therapy without consuming the drugs that may have severe side effects on body and mind. Furthermore, an addiction may set in over the long consumption of drugs unlike aromatherapy.

Materials and Methods

Essential oils namely Clove oil, Wintergreen oil (synthetic), Camphor oil, Palmrosa oil, Eucalyptus oil, Orange oil, Bergamot oil, Patchouli oil, Sugandh Kokila oil, Peppermint oil, Lavender oil, Basil oil were purchased from the Princess Street Mumbai large whole sale market for variety of essential oils. Olfactory strips were employed for recognizing the qualitative status. Formulations were prepared employing the vehicles amongst Apricot oil, Olive oil, Sesame oil, Mustard oil depending upon the need of treating the ailments. Entire percentage of the formulations was maintained 100% v/v. 10 females of 60 and above, 10 males of age 50 were selected for arthritis and migraine symptoms. 20 years of boy having spinal pain also treated with the formula.

Aromatherapy for arthritis

Essential oil like Clove oil, Wintergreen oil, Camphor oil, Palmrosa oil, Eucalyptus oil were blended in the Mustard oil as it is also helps in reducing the elevation of pain of arthritis and works well for this particular formulae.

Aromatherapy for migraine

Essential oils like Orange oil, Bergamot oil, Patchouli oil, Sugandh Kokila oil, Peppermint oil, Lavender oil, Basil oil were blended in either sesame or apricot oil for better skin absorption of the formulae to release the fast onset of the action [5,6]. 30 Patients in the age group of 25-55 who suffered from the migraine were treated but the terms and condition was no one must be allergic to this aroma.

Results and Discussion

Arthritis management

Many of the patients who were recommended the steroidal hormone intake to ease out the rheumatic pain in the long run found the complexities. Instead some of them prefer to opt for aromatherapy; my friend and colleague's mother have been using the formulations to combat her knee joint pain which may be a type of rheumatism since last many years and she reported relief from using this formulations. The other patient reported to have pain in his left leg and was recommended to apply the arthritis formulation and within a week time from using the formula he reported to have comfort. The pain in his leg was probably corrected due to veins dilation and allowing the blood flow. It may be said that the essential oils mixes with the blood stream and brought about the hormonal secretions.

The recent growth of self-help and support programs has enlightened the healthcare consumer in choosing treatments. Contemporary clinical practice may now include methods that reflect the interconnectedness between the mind and body, such as biofeedback, healing touch, aromatherapy, progressive relaxation, meditation, and behavioural therapy.

The recent increase in self-help and support programs has been educating consumers receive health care in the treatment of choice. Contemporary clinical practice today biofeedback, healing touch, aromatherapy, progressive muscle relaxation, and meditation including the correlation to reflect the mental and physical and behavioural therapies, such as, self-help, self-reliance progressive relaxation, (PR): progressive muscle relaxation interconnectedness: correlation. The formulation was clinically tried in many of the patients those who

were suffering from the knee, shoulder, back pain, spondolytis headache reported to have combat the pain within 15 minutes of the application. Some of the patients are the regular consumer of the formulae. It may be continued as long as possible as the therapy does not have any complications and/or side effects. It is neither addiction. The author once has suffered with the hyperurecimea and the tibia bone was inflammated. Regular gentle massages on the tibia over the fifteen days have sown to heal the pain as well inflammation was cured. The cost of the formulation sometime makes some patients to discontinue the treatment but the cost may not be compromised [5,6].

Compositions	Botanical Name	Constituents	Vehicle	v/v	Doses
Clove oil	Sygygium aromaticum	Euganol (76.8%), β - Caryophyllene (17.4%), α - humulene (2.1%), eugenyl acetate (1.2%)	Sesame oil/ Mustard oil	60%	As per severity
Wintergreen oil (synthetic)	Eucalyptus globules	Methyl salicylate 99.9%	do	do	do
Camphor oil	Cinnamommum camphora	a-pinene, camphene, b-pinene, sabinene, Phellandrene, li- monene, 1,8-cineole, y-terpinene, p-cymene, terpinolene, furfural, camphor, linalool, bornyl acetate, terpinen-4-ol, cary- ophyllene, borneol, piperitone, geraniol, safrole, cinnamalde- hyde, methyl cinnamate and eugenol.	do	do	do
Palmrosa oil	Cymbopogon martinii	Geraniol, Citronellol, Farnesol, Citral, Citronellal, Geranyl Acetate.	do	do	do
Eucalyptus oil		(Sesquiterpenes) farnesene, limonene, pinene, linalylacetate, geraniol acetate, citral, citronellal, thujone, jasmine, linalool, citronellol, geraniol, farnesol, bisabolol, euganol, thymol, carvacrol, cineool (eucalyptol)	do	do	do

 Table 1: Essential oils constituents and doses for arthritis formulation.

Aromatherapy involves pure essential oils with excellent anti-inflammatory, ant rheumatic properties as established by many researchers in the past and currently in their aromatherapy centers. It works on the basis of olfaction and absorption and directly mixes in the blood stream and brings about many physiological changes though an exact mechanism is unknown. It also improves hormone secretions in the blood stream that elevates mood swings. When the formula massaged on the body it is absorbed through the skin and goes to blood stream that dilate the veins for easy blood flow and subsidize the pain within shorter times. Migraine is a complex disorder involving the brain and the blood vessels around the brain and head. The brain may become hyperactive in response to certain environmental triggers, such as light or smells, for reasons that are not known. This starts a series of chemical changes that irritate the pain sensing nerves around the head and cause blood vessels to expand and leak chemicals which further irritate the nerves. Therefore aromatherapy formula clinically tested here to found improving the hormone secretions around scalp area and brings enormous calmness. Migraines usually appear between the ages of 10 and 40. After the age of 50, they tend to disappear, especially among women after menopause [7-9].

Migraine management

Migraines in women can be attributed to a progesterone deficiency that occurs during the menstrual cycle. In fact 65% of sufferers complain of headaches right before, during or after menstruation. The combinations of essential oils that is used for combating the migraine perhaps helps in maintaining the progesterone level and that helps in easing out the migraine pain but this issue may take place in the younger women also who tries to keep it controlled with the allopathic medicines [7,8]. For many people with migraine attacks, triptans are the drug of choice. They are effective in relieving the pain, nausea, and sensitivity to light and sound that are associated with migraines. Medications include sumatriptan (Imitrex), rizatriptan (Maxalt), almotriptan (Axert), naratriptan (Amerge), zolmitriptan (Zomig), frovatriptan (Frova) and eletriptan (Relpax). Side effects of triptans include nausea, dizziness and muscle weakness. They aren't recommended for people at risk for strokes and heart attacks. A single-tablet combination of sumatriptan and naproxen sodium (Treximet) has proved more effective in relieving migraine symptoms than either medication on its own. But this may be addiction unlike aromatherapy which is believed to be functioning in a natural way in the body [9,10].

During the middle of menstrual cycle, (the last two weeks before period begins), take progesterone based herbs, such as chaste berry, wild yam, sarsaparilla, and yarrow. The herbs are available in tincture and tablet form. Also try hormone-balancing evening-primrose oil or magnesium supplements, which help relax constricted blood vessels. The best-kept secret for migraine relief is aromatherapy.

It is affordable, effective, and has no side-effects. Aromatic essential oils have medicinal properties that reduce the intensity of head pain and ease related nausea and insomnia. Oils also restore equilibrium after a migraine. A combination of all of the following oils: Lavender and eucalyptus (to relax), marjoram (to reduce muscle tension), chamomile (to relieve nausea) and peppermint (to alter mood) may be employed in consultation with therapist/practitioner.

My mother often suffers with the migraine and she uses the formulae. Once the prepared formulation is applied on her scalp, quickly her get relief and now she regularly uses the therapy. Almotripatn, Amitriptylin, Aspirin, Oxycodone, Butalbital, Caffeine, Buclizine, Buprenorphine, Cyclobenzaprine, Divalproex, Eletriptane etc are recommended drugs for combating migraine. This medication may cause fewer side effects than ergotamine and is less likely to lead to medication-overuse headaches and anti-nausea medications. Because migraines are often accompanied by nausea, with or without vomiting, medication for nausea is appropriate and is usually combined with other medications. Clinically studied formulations did not any side effects or the addictions. These may be used safely [9-11].

Compositions	Botanical Name	Constituents	Vehicle	v/v	Doses
Orange oil	Citrus sinensis	Limonene, α - pinene, sabinene, β - pinene, myrecene, octanal, linalool, δ - 3-carene, decanal	Olive oil/ coconut oil	15-20	As per severity
Peppermint oil	Menthe piperita	menthol 30-55%, menthone 14-32%, menthyl acetate 2.8-10%, isomenthone 1.5-10%, menthofuran 1-9%, cineole 3.5-14%, pulegone 4%, limonene 1-5%, isopulegol 0.2% and carvone 1%	do	do	do
Bergamot oil	Citrus bergamia	linalyl acetate (30-60%), linalool (11-22%), and other alcohols bergapten (~ 0.4% 5-methoxypsoralen, bergamottin (5-geranyloxypsoralen), citropten (5,7-dimethoxycoumarin.	do	do	do
Basil oil	Ocimum basili- cum	1,8-cineole, trans - ß - ocimene, camphor, linalool methyl chavicol geraniol, citral eugenol, methyl cinnamate, methyl eugenol, ß - caryophyllene, and elemene, and ß - bisabolene.	do	do	do
Lavender oil	Lavendula offici nalis	Linalool 29-46%, Linalyl Acetate 36-51%, 1,8-Cineol 0.1-2.2%, Caryophyllene 2.5-7.6%, Terpinen-4-ol 2.7-6.9%,Ocimenes 2.5-10.8%, Lavandulyl Acetate 3.4-6.2%.	do	do	do
Sugandh kokila oil	Cinnamomum glaucescens	Eucalyptol, ß - phellandrene (trace), p-Cymene, a-terpinene (trace), Sabinene, ß - myrcene (trace), Trans methyl cinnamate, Camphor, Lina- lool, a-pinene, ß - pinene.	do	do	do
Patchouli oil	Pogostemon ca- blin	β - patchoulene, α - guaiene, caryophyllene, α - patchoulene, seychellene, α - bulnesene, norpatchoulenol, patchouli alcohol and pogostol.	do	do	do

Table 2: Essential oils constituents and doses for migraine formulation.

Conclusion

My routine practice noticed that these formulations play a wonder role in today's stressful life style for combating arthritis and migraine for many patients without recording any side effects whatsoever. The only condition is that these may not be recommended for those patients who have an allergy towards aromas. The sections of arthritis and migraines have been dealt in an elaborative way and

treatment on some of the patients who have reported to be having comforts with their related diseases. My efforts were to practice the aromatherapy after reading many medical bulletins and having done researches in the field of essential oils. It was utmost concerning to understand the combinations of essential oils on the combating of certain diseases.

Precaution

Camphor oil is powerful oil and should be used with care. It is not really used in aromatherapy as it is classed as a convulsing and neurotoxin.

Overdose

Overdosing can cause convulsions and vomiting and pregnant women as well as people suffering from epilepsy and asthma should not use it. The brown and yellow camphor oil has a very high safrole content, with yellow having between 10-20% and the brown having 80%. These two oils are considered toxic, as well as carcinogenic.

Acknowledgements

I declare my Recognition to Dr. Anne George, MBBS, DGO, MD, MAMS, Dip Acupuncture Institute of Holistic Medical Sciences and Dr. Mathew Sebastian MBBS, MD, Austria for having asked me to write research paper, and invite for the talk.

Bibliography

- 1. Matteliano D. "Holistic nursing management of pain and suffering: a historical view with contemporary applications. *The Journal of the New York State Nurses' Association* 34.1 (2003): 4-8.
- 2. Snyder M and Wieland J. "Complementary and alternative therapies: what is their place in the management of chronic pain?" *Nursing Clinics of North America* 38.3 (2003): 495-508.
- 3. Sayyah M., *et al.* "Analgesic and anti-inflammatory activity of the leaf essential oil of Laurus nobilis Linn". *Phytotherapy Research* 17.7 (2003): 733-736.
- 4. Smith CA., et al. "Complementary and alternative therapies for pain management in labour." Cochrane Database of Systematic Reviews 2006, Issue 4. Art. No.: CD003521. DOI: 10.1002/14651858.CD003521.pub2 (2003).
- 5. Abena AA., et al. "Analgesic, antipyretic and anti-inflammatory effects of essential oil of Lippia multiflora." Fitoterapia 74.3 (2003): 231-236.
- 6. Rabelo M., et al. "Antinociceptive properties of the essential oil of Ocimum gratissimum L. (Labiatae) in mice." Brazilian Journal Of Medical and Biological Research 36.4 (2003): 521-524.
- 7. Edge J. "A pilot study addressing the effect of aromatherapy massage on mood, anxiety and relaxation in adult mental health." *Complementary Therapies in Nursing and Midwifery* 9.2 (2003): 90-97.
- 8. Wood K. "The promise of aromatherapy. Essential oils have been shown in clinical trials to soothe some chronic ills brought on by old age." *Provider* 29.3 (2003): 47-48.
- 9. Emslie MJ., et al. "Changes in public awareness of, attitudes to, and use of complementary therapy in North East Scotland: surveys in 1993 and 1999." *Complementary Therapies in Medicine* 10.3 (2002): 148-153.
- 10. Goubet N., et al. "Olfactory experience mediates response to pain in preterm newborns." *Developmental Psychobiology* 42.2 (2003): 171-180.
- 11. Yim VWC., et al. "A Review on the Effects of Aromatherapy for Patients with Depressive Symptoms." *The Journal of Alternative and Complementary Medicine* 15.2 (2009): 187-195.

Volume 1 Issue 1 December 2014

© All rights are reserved by Omprakash H Nautival.