

Essential Oils in the Clinical Practice

Dr. Ed Kondrot's Podcast and Website

March 19, 2020

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GOALS

- Learn what is aromatherapy or the use of essential oils
- Learn a new medical treatment system
- This is not only about ambience, good smells and massage
- Applications and usages
- Results and Medical Literature

Aromatherapy

- The treatment and/or prevention of disease by the use of essential oils

De Materia Medica

- First medical textbook year 65 AD
- Written by Dioscorides
- About 600 medicinal plants, 90 minerals and 30 substances of animal origin
- Precursor to pharmacopeia
- More than 200 essential oils are mentioned to promote health and wellness

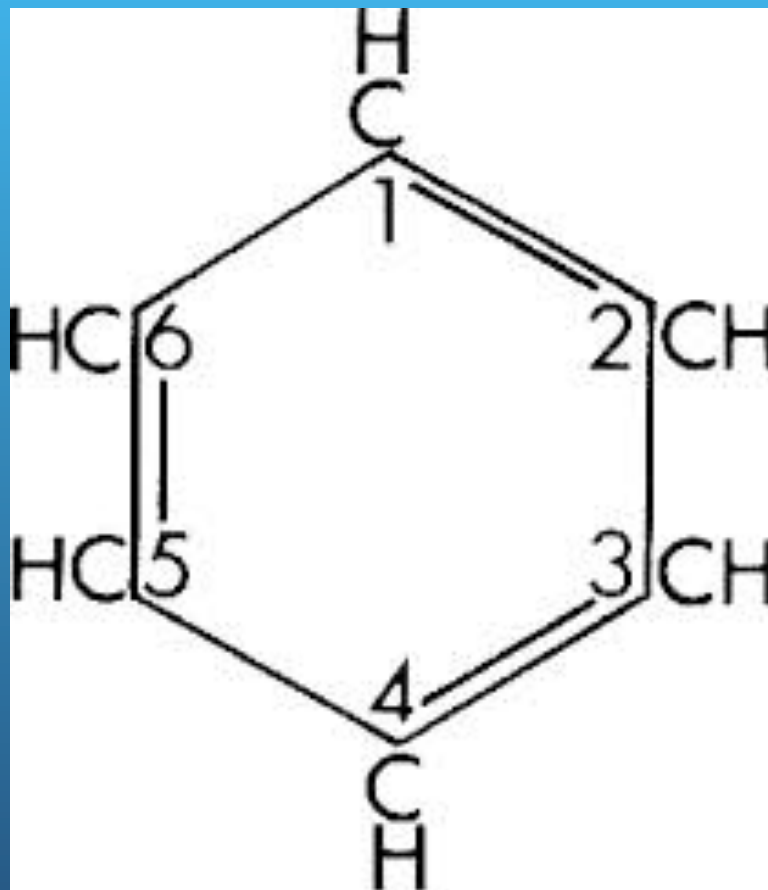
Chemical Properties of Oils

- Phenols
- Monoterpenes
- Sesquaterpenes
- Aromatic rings
- Alcohols, aldehydes, ketones

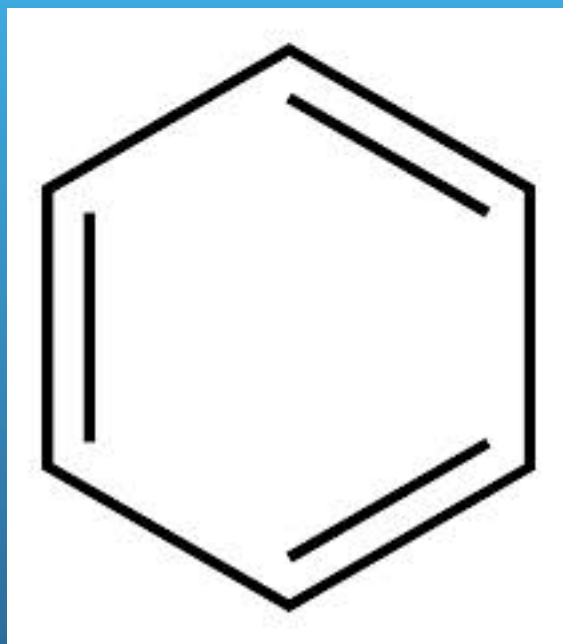
Chemical Components

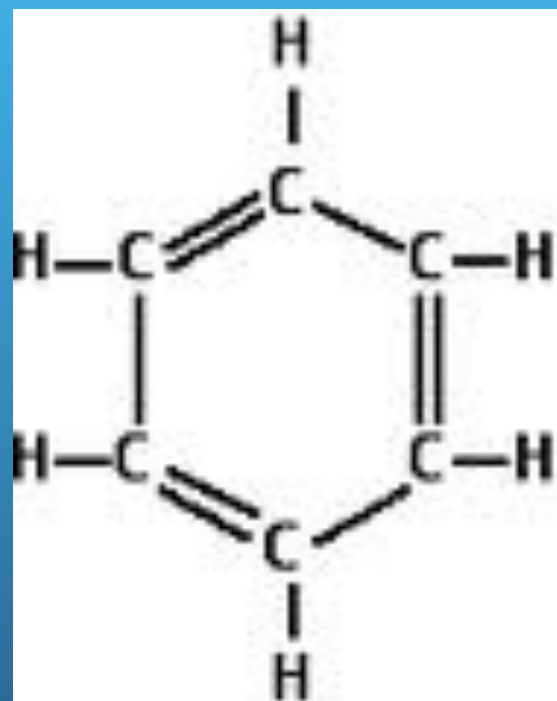
- These are made by plants to:
- Protect against stresses(temperature variations, droughts)
- Protect against free radicals
- Fight infections(bacterial, viral, fungal and parasitic)

Aromatic Benzene Ring



Aromatic Benzene Ring





Benzene depicted in three ways

Aromatic Ring

- Aromatherapy

Properties of Essential Oils

- Naturally occurring
- Volatile
- Rises quickly into the air, compact
- Absorbed into the body
- Oils like coconut, almond, sesame are non-volatile
- They are long and lubricating
- Not absorbed through the skin

Properties

- Diffuses inter and intra-cellularly once inside the body
- Extremely lipid soluble, weak water solubility

Properties

- Can go upwind or against the flow of air current due to its high rate of diffusion

Properties

- Antibacterial
- antifungal
- antiviral
- anti-helminthic

Properties

- Ability to dissolve plastics and petrochemicals
- Transport of petrochemicals and other contaminants

Properties

- Analgesic

Essential oils-Modes of Extraction

- Steam distillation
- Absolute-Ethanol Extraction

Suppliers

- Sevessence-France
- Young Living Oils- USA

Modes of Application

- Inhalation
- Aerial Diffusion
- Direct Application
- Ingestion

Mechanisms of Action

- Through its effect on the limbic system by direct inhalation through the olfactory system and nerves
- Pharmacological effects

Mechanisms of Action

- Smell alerts us of outside world
- Olfactory nerve hairs vibrate signals into the limbic system
- Where we house emotions, memories and subconscious thoughts
- Then to thalamus and cortex to determine if the smell is pleasant or unpleasant

Antiviral activity

- Against RNA(Corona) and DNA viruses
- Herpes 1,2
- Dengue
- Influenza
- Polio
- Junin
- Coxsackie Virus
- Tariq et al, Microb. Pathol., 2019,Sept:134

Antiviral Oils

- Lavender
- Basil
- Oregano, Rose
- Marjoram
- Cajeput (antitussive)
- Cypress
- Tea tree, eucalyptus, pine
- Myrrh

Viruses

- Particles of genetic material
- They have an envelope or coat
- No organelles
- Needs a living cell to reproduce
- They express themselves when the organism is weak
- (Stress, pollution, electromagnetic pollution)
- 5G complete coverage in Wuhan

Methicillin Resistant *Staphylococcus aureus* (MRSA)



Tea Tree Essential Oil

- Dryden, M., Dailly, S., Crouch, M. (2004). A randomized, controlled trial of tea tree topical preparations versus a standard topical regimen for the clearance of MRSA colonization. *Journal of Hospital Infec*, 56(4), 283-6

More effective on eradicating MRSA than chlorhexidine or silver sulfadiazine on the skin

Hammer, K. A., & Riley, T. V. (1998). In-vitro activity of essential oils, in particular *Melaleuca alternifolia* (tea tree) oil and tea tree oil products, against *Candida* spp. *Journal of Antimicrobial Chemotherapy*, 42, 591-5.

Effective against MRSA and *Candida*

MRSA

- Sherry, E., Warnke, P. H. (2001). Percutaneous treatment of chronic MRSA osteomyelitis with a novel plant-derived antiseptic. *BMC Surgery*, 1(1).

Stress, Depression and Anxiety

- Essential oils reduced symptoms of stress, depression and anxiety in 32 studies
- Hansen, T., Hansen, B., Ringdal, G. (2006). Does aromatherapy massage reduce job-related stress? Results from a randomized, controlled trial. *International Journal of Aromatherapy*, 16(2), 89-94.

Stress, depression, anxiety

- Emotion Blend-Marjoram, valerian root
- Stress-Orange, Y-lang, patchouli
- Meditation-Juniper berry, vetivert, lavender
- Fem Balance-Geranium rose, ylang, lavender



Cough and cold symptoms

- * Paul IM, Beiler JS, King TS, Clapp ER, Vallati J, Berlin CM. Vapor rub, petrolatum, and no treatment for children with nocturnal cough and cold symptoms. *Pediatrics*. 2010;126(6):1092-1099.
- Randomized study 138 patients (petrolatum, no treatment, petrolatum with menthol, camphor and eucalyptus oils)
- 2-11 years old
- Treatment group did significantly better

Agitation in Dementia

- Ballard, C.G., O'Brien, J.T., Reichelt, K., Perry, E.K. (2002). Aromatherapy as a safe and effective treatment for the management of agitation in severe dementia: the results of a double-blind, placebo-controlled trial with Melissa. *Journal of Clinical Psychiatry*, 63, 553-8.

Anxiety Disorders

Randomized studies

- Silexan (Pill form of lavender oil) more effective than
- Placebo in reducing all symptoms of anxiety
- Woelk, H & Schlafke, S. (2009). A multi-center, double-blind, randomized study of the lavender oil preparation Silexan in comparison to Lorazepam for generalized anxiety disorder. *Phytomedicine*, 17, 94-99.

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Anxiety Disorders

Randomized studies

- Silexan versus Lorazepam (ativan) by mouth
- After 6 weeks produced the same reduction of anxiety,
- Sleep improvement without side effects or
- Potential for addiction

PAIN CONTROL

- Marcial-Vega et al 2013
- From 2009-2012
- 150 pts
- $116/150 = 77\%$ a diagnosis of cancer
- Headaches, back pain, shoulder-neck pain, knee
- Tumor area

PAINLESS BLEND

- Pain, Peppermint, Circulation
- Birch, Marjoram, Sage, Clary Sage, Lavender
- 150 patients
- 90% reduction or disappearance of pain
- Effects noted in 5 minutes
- No side effects
- Marcial-Vega 2013

Fever Control

- Spray peppermint oils and water on the back of the neck
- 5 drops per ounce of water
- May see a rapid drop in temperature of 2-5 degrees Fahrenheit

Air Purification and Sterilization

- Inouye, S., Yamaguchi, H. (2001). Antibacterial activity of essential oils and their major constituents against respiratory tract pathogens by gaseous contact. *Journal of Antimicrobial Chemotherapy*, 47, 565-73.

Human Papilloma Virus

- Millar, B & Moore, J. (2008). Successful topical treatment of hand warts in a paediatric patient with tea tree oil (*Melaleuca alternifolia*). *Complementary Therapies in Clinical Practice*, 14(4), 225-27.

Fever Blister Blend

- May apply on the skin when first signs of herpes appears
- Repeat once or twice a day
- Contains essential oils of lavender, eucalyptus, myhrr,
- tea tree and oregano

Oral Use (Randomized studies)

- Monoterpenes (eucalyptus, Pine needle, citrus peel oils)
- 3 month consumption(246 pts) reduced the risk of exacerbation in winter months in patients with chronic bronchitis
- * Hasani A, Pavia D, Toms N, et al. Effect of aromatics on lung mucociliary clearance in patients with chronic airways obstruction. *J Altern Complement Med.* 2003;9:243-249.

Oral Use

(Randomized studies)

- Acute Bronchitis- 676 patients . More effective than placebo in improving the episodes
- * Matthys H, de Mey C, Carls C, et al. Efficacy and tolerability of Myrtol standardized in acute bronchitis. A multi-centre, randomised, double-blind, placebo-controlled parallel group clinical trial vs. cefuroxime and ambroxol. *Arzneimittelforschung*. 2000;50:700-711.
- No bacterial resistance

Oral Use

Randomized study

- Randomized study in patients with dyspepsia
- Better than placebo
- * Madisch A, Heydenreich CJ, Wieland V, et al. Treatment of functional dyspepsia with a fixed peppermint oil and caraway oil combination preparation as compared to cisapride. A multicenter, reference-controlled double-blind equivalence study. *Arzneimittelforschung*. 1999;49:925-932.

Food Poisoning

- Clinical diagnosis shortly after food ingestion
- Borborygmy, increased intestinal transit and sounds before diarrhea or vomiting occur
- Classic Triad of acute abdominal distention, chills and fever

Food Poisoning

- Marcial-Vega 2014
- 5 patients
- All had fevers, chills, rapid onset malaise, abdominal distention
- All had 3-5 drops of lavender/8 oz of water
- All resolved all their symptoms within 20-30 minutes

Irritable Bowel Syndrome

- Pittler MH, Ernst E. Peppermint oil for irritable bowel syndrome: a critical review and meta-analysis. *Am J Gastroenterol*. 1998;93:1131-1135.

Peppermint for Parasites

- 15 patients with evidence of parasites or parasite eggs
- 1 drop / peppermint in one glass of water TID
- In 3 weeks all had negative findings in their stool
- Marcial-Vega 2012

Gynegological Infections

- Pea EF. *Melaleuca alternifolia* oil. Its use for trichomonal vaginitis and other vaginal infections. *Obstet Gynecol.* 1962;19:793-795.
- Effective in eradicating infections

Rosemary, Lavender, Cedarwood

- Prospective Randomized Study showed
- [Arch Dermatol.](#) 1998 Nov;134(11):1349-52.
- Randomized trial of aromatherapy. Successful treatment for alopecia areata.
- [Hay IC¹](#), [Jamieson M](#), [Ormerod AD](#).
- 44% improvement versus 15% with carrier oil only

Biblical References

- Birth of Jesus of Nazareth
- 3 Wise Men Gifts
- Myhrrr
- Frankincense
- Gold

Biblical References

- Arameic Language
- One of the 12 tribes of Israel
- Liquid Gold = 2 thousand years ago referred to the needle(small leaves) essential oil of a small extinct Russian pine tree
- Perhaps why Christmass is still celebrated with Pine Trees

Decubitus Ulcers

- Lavender Oil on ulcers
- Application 2-3 times a day without the use of bandages
- Healing within one week of 85% of 33 ulcers
- Improvement in the other 15%
- No side effects
- No staining of skin, clothing or bed-sheets
- Marcial-Vega, 2014

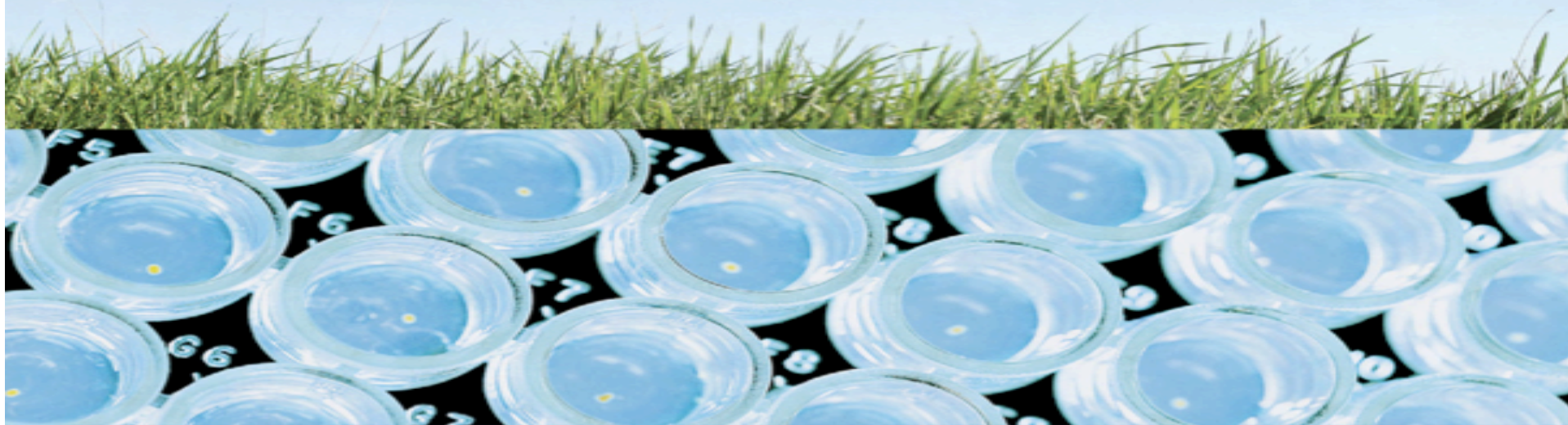
Ovarian Cysts

- 23 patients with ovarian cysts
- Lavender oil 1 drop/2 oz purified water
- Vaginal douche at bedtime nightly for 4 weeks
- Repeat ultrasound
- Complete resolution of cysts less than 2 cm
- 2-5 cm 65% complete resolution, 35% smaller
- Less menses related pains
- Marcial-Vega, MD 2013

2008–2009 Annual Report  President's Cancer Panel

REDUCING ENVIRONMENTAL CANCER RISK

What We Can Do Now



President's Cancer Panel Report 2010



Shingles

- If it involves the eye, it is a medical emergency
- Involving only the surrounding skin of the eye may use Fever Blister Blend directly with microcurrent
- Early intervention(same day) may yield positive results that same day

Sinus Cold Blend

- Contains eucalyptus, pine, peppermint
- Inhale deeply
- May apply over sinuses (maxillary, frontal)
- May also apply a small amount inside each nostril and a little of water and inhaled deeply

Types of Oils

- Mild-Relaxing-
- Ylang, Lavender, Jasmine, Orange, Neroli
- Vetiver, Pine needle

Types of Oils

- Stimulating-Strong
- Eucalyptus, Peppermint, Camphor, Oregano, Basil
- Garlic, Onion, Tea Tree, Marjoram, Rosemary

Mild On skin

- Lavender
- Ylang
- Pine Needle

Hand Gel

- Use essential oils due to
- Penetration
- Broad Anti-microbial effect
- Long lasting

Blends

- Meaning 2 or more oils together to achieve a more effective and rapid effect
- Synergistic

Lavender Oil

- Verstaile
- Antimicrobial
- Analgesic
- Antiinflammatory, decongestant, relaxer
- Can put inside the nose, on the ears and eyelids, taken internally

Pine Needle/Fir Needle Oil

- Similar properties to Lavender
- Can also be used to energize
- Hand sanitation

Stress Blend

- Patchouli, Orange Peel, Ylang
- Put 2-3 drops on the palm of the hand
- Inhale deeply and hold your breath
- Repeat until there is no more smell

Emotion Blend

- Valerian Root Oil
- Marjoram
- Inhaled for anxiety and panic attacks

Ylang

- Very relaxing
- Will lower blood pressure more than 20 systolic points and/or 10 diastolic points in patients with hypertension who inhale it for 20 minutes
- Do not use in pregnant females or in patients with very low pressure

BASIL

- Can improve discomfort from otitis media together with lavender, pine needle oil within 20 minutes after application to the external ear
- 14 patients with ear pain and distended tympanic membrane
- 10 had fevers and/or chills
- All had marked improvement in pain within 20 minutes. All were comfortable in 3 hours, NONE NEEDED ANTIBIOTICS
- Marcial Vega, MD 2013

Anise Oil

- Tamiflu comes from this oil
- Potent antiviral
- Take 5 drops orally every hour for flu symptoms
- Improves symptoms within 24 hours in more than 2/3 of patients
- Marcial-vega, 2013
- Inhaled it is an appetite suppressor

Meditation

- Vetivert, lavender
- Very relaxing blend

Frankincense

- Can increase cerebral blood flow up to 28%
- Can repair damaged DNA
- [http://search.aol.com/aol/search?
&s_qt=sb&q=Frankincense+and+DNA+repair&tb_oid=14-0
2-2013&s_it=aolmail&tb_mrud=01-10-2013&tb_uuid=201
30214115159723](http://search.aol.com/aol/search?&s_qt=sb&q=Frankincense+and+DNA+repair&tb_oid=14-02-2013&s_it=aolmail&tb_mrud=01-10-2013&tb_uuid=20130214115159723)

Pain, Peppermint , Circulation

- Birch, Peppermint, Clary Sage, Sage, Lavender
- Apply on area of pain
- One oil and 2 Blends

Ordering Oils

- Cecilia Urrego
- 9930 SW 138th St
- Miami, Florida, 33176
- 305-772-4410
- 305-479-2323