



Pharmacy Newscapsule

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AROMATHERAPY

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You may have seen the use of essential oils or aromatherapy with residents in assisted living facilities or nursing homes. The use of essential oils as a nonpharmacological treatment for dementia behaviors is increasing with some success in some individuals. The use of aromatherapy expands beyond behavior management and has been around for a long time. It may be viewed as controversial due to lack of scientific evidence but, for some people, especially individuals with dementia, it can be an effective treatment. When aromatherapy/essential oils are used, there are some safety implications that need to be considered, particularly when used in a health care setting and with elderly patients.

Education and Training

The Alliance of International Aromatherapists (AIA) and the National Association of Holistic Aromatherapy (NAHA) are two organizations that provide standards of practice, ethical guidelines, and require education and training hours for certification. NAHA requires 200 hours of education and training to be considered a professional aromatherapist and requires safety training, as well as physiology of the body systems education. Practitioners should understand the effects of the oils, how they are absorbed (topically, by inhalation), and potential medication interactions. Practitioners should also know how to source quality essential oils and how to avoid adulterated or incorrectly labeled products on the market.

Safety Issues

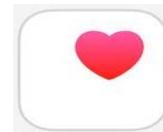
Many essential oils are extremely concentrated products and can cause harm if used inappropriately. A practitioner using aromatherapy should understand the physiologic effects of each oil and when its use would be contraindicated for a patient. For example, certain oils can increase sensitivity to the sun (cumin, lemon, lime) and it would be important to avoid these oils in the sunny months

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There is an APP for That!



Have you updated your iPhone lately? The newest operating system for Apple products (iOS 8) contains a free app called "Health." The app is designed to be a one-stop shop for tracking all your health care concerns, such as blood pressure, calories, weight, and sleep quality.

While Health is mostly designed to aggregate and display data via charts and graphs, the app will track some things for you, like steps taken throughout the day, with the iPhone's built-in motion sensor. Health can connect with many other available apps as well, and collect data from them to help you get a better, overall picture of where your health is at.

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or if a patient is on medications that already increase sun sensitivity (like tetracycline). Oils should not be applied to broken skin or mucus membranes and many should not be added to full-body baths for that reason.

Practitioners should also be aware of potential drug interactions between medications and oils and consult with the patient's pharmacist or doctor about possible issues. For example, peppermint essential oil has methyl salicylate, which can be absorbed topically and would be contraindicated in a patient on aspirin or with an allergy to salicylates.

Storage

Most essential oils should be stored in a cool, non-humid place, away from other medications.

Use in Practice

Certain oils (lavender, geranium, bergamot, and jasmine) are noted to have antidepressant and anxiolytic properties, and have been used in patients to soothe agitation, promote sleep, reduce falls, minimize the use of restraints, and decrease antipsychotic medications. Lemon balm has also been studied in patients with dementia and is used to decrease social withdrawal and agitation. Many small, open-label trials have been used to study the use of aromatherapy and the effects on symptoms (e.g., agitation, aggression, wandering, social withdrawal in patients with dementia) and have varying results on efficacy. These trials are all small and sometimes without statistical analysis, blinding, or placebo control. So, results must be interpreted carefully.

Surveyor Message

Safety is the main message. Storing essential oils safely to avoid inappropriate use or accidents is a concern. Regulations do not explicitly require specific methods of storage, but regulations pertaining to resident protection and accidents could be used to evaluate safe storage of aromatherapy oils. Another safety concern is resident adverse effects. Evaluation of allergies and response to any adverse effects is another area surveyors may wish to look at if there are concerns for a resident when aromatherapy is being used. The good news is that, like many other types of nonpharmacological dementia behavior interventions, aromatherapy may be very beneficial for some individuals.

DIFFICULT C.DIFF TREATMENT by Lisa Sardesai, D.Ph.- 4

The purpose of this article is to provide information and guidance on the treatment of *Clostridium difficile* infection (C. Diff) and the determination of when alternative treatments or preventive therapy may be indicated in a patient/resident. C. diff is a serious infection caused by opportunistic bacteria that colonize the gut after antibiotic therapy depletes the normal gut flora. C. diff emits toxins that cause inflammation and diarrhea and can lead to severe colitis, toxic megacolon, or paralytic ileus. The CDC considers C. diff to be one of the top three urgent public health threats facing America today. C. diff infection is intimately tied to health care and antibiotic use, with 25% of infections showing up in hospital inpatients, and 75% of infections showing up in nursing home residents.

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The use of oral vancomycin or metronidazole to treat symptomatic C. diff infection is well established in clinical practice guidelines such as the Infectious Disease Society of America/Society of Healthcare Epidemiology (IDSA/SHEA) guidelines; however, the course of C. diff infection varies among patients and therapies may subsequently vary, as well. It is important to recognize that C. diff infection may resolve after the first 10-14 day course of antibiotics or that it can be a long, complicated course with many recurrences. In general, metronidazole is recommended for mild-to-moderate C. diff infection treatment, while vancomycin is reserved for more severe infection (or metronidazole intolerance or nonresponse).

Combination therapy of both oral vancomycin and intravenous metronidazole is rarely utilized, but it is recommended by the IDSA/SHEA guidelines in severe situations complicated by toxic megacolon, ileus, or shock. In most other cases, though, there is a lack of data to demonstrate an increase in efficacy in treatment compared to a single agent, and patients are at risk of increased side effects from being on both medications. Metronidazole, by itself, may be used to treat the first recurrence but, generally, should not be used for any further recurrences of infection, as it has neurotoxic effects with long-term usage.

Prevention of recurrent C. diff infection is also an issue for many institutionalized patients. A patient is generally at a 20% risk of recurrence after treatment of the first infection, but at a 65% higher risk of recurrence after the second recurrence of infection. Most recurrences occur one to three weeks after treatment. Probiotics have actually been shown, in some clinical trials, to have beneficial effects on prevention. Treatment of asymptomatic carriers of C. diff with either metronidazole or vancomycin, on the other hand, has not been shown to have any benefit. Some patients, in very rare circumstances, may suffer from relapsing C. diff infection and may require prophylactic therapy with antibiotics or alternative treatments to prevent further recurrences.

Sources:

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CONSULTANT CORNER

by Doug Englebert, R.Ph.

1. **A CBRF resident takes the city bus to attend work once a week. His employer requires the resident's medications to be delivered to the facility and that facility staff hand medications to work staff. The facility does not feel it is safe to transfer the resident's punch card with him as he travels on the city bus. How can the facility meet all requirements while also maintaining the resident's independent bus travel and allowing medication transfer between staff?**

In this case, the resident is in a CBRF; however, this situation can occur with other types of assisted living facilities. The following is a sample of potential options that can cross over to other facility types:

- a. The prescription may be changed so that the medication does not need to be taken at work.
- b. The employer maintains a month's supply of medication so that handoffs can be made monthly, rather than daily or weekly.
- c. After consideration, an employer may allow a resident to hand-off medications to work staff. If medication tampering is a concern, the use of some type of sealed, tamper-evident packaging may be possible.
- d. The CBRF and residential care apartment complex rules allow for repackaging of medications under certain circumstances with specific instructions.
- e. Pharmacy may be able to provide medications in packaging to facilitate transferring medications to the work place --- for example, tear off bubble packs or strip packaging.

The resident, work staff, facility staff, and the pharmacist need to discuss and understand all relevant regulations and/or requirements and find a viable solution that maintains the resident's desired level of independence.

2. Can a nursing home send medications, including controlled substances, home with a resident at the time of discharge?

When a resident is discharged from a nursing home, discharge planning should include a consideration of the resident's medication needs. If the resident will continue using the same medications at home that they have been taking in the nursing home, the medications can be sent home with the resident as long as those medications are maintained in the appropriately labeled containers received from the pharmacy.

However, facilities may wish to solicit legal advice and develop procedures for situations where medications are on hold or have been discontinued. Facilities may also decide to adopt procedures whereby a resident is provided information about discharge and medications prior to the time of discharge. Adopting such procedures and informing residents early can help eliminate confusion and arguments at the time of discharge.