

KY Chapter Immigrant Child Health Task Force

January, 2020

YOU PUT WHAT? WHERE?

CASE 1:

4-year-old Latin American female child presents to clinic with her mother for red eyes and drainage that began this morning. A cousin recently had similar symptoms. She has full extraocular motion of eyes, no significant edema, but her conjunctiva bilaterally is hyperemic. She has mucus-like drainage on her eyelashes and exam is otherwise consistent with likely viral conjunctivitis. When asked if mom has tried anything to alleviate her daughter's symptoms so far, she says she's applied **chamomile tea** compresses to her daughter's eyes which seemed to help a little. Additionally, she says she has used this remedy several times in the past for intermittent eczema flairs on her children's skin.

What do you think about this remedy? How would you counsel this mother about symptomatic care of this condition?

CASE 2:

A 29-year-old mother, recently moved from West Africa, brings her newborn baby to clinic. She is exclusively breastfeeding. Her mother has flown to the U.S. to be with her daughter for the post-partum period and insists on her daughter drinking several cups per day of a tea called **moringa** for her health and recovery.

What is **moringa**? Does this carry any risk to the breastfeeding infant? Where would you go to find more information about this?

CASE 3:

A 2-year-old boy of South Asian descent is brought to clinic for emergency department follow up of an accidental second degree burn of the left forearm, which occurred approximately one week prior. His pain has improved significantly over the past week and the family denies any fever, purulent drainage, or signs of secondary infection. On exam there is healthy pink new skin in the area of the burn and it has been kept clean and dry with the exception of some yellow discoloration of some of the skin and evidence of a chalky yellow paste around the wound. When asked about this, parents tell you this is "**curcumin**" or **turmeric** to help with the wound healing and inflammation.

What information can you find about the medicinal properties of **turmeric**? Is this safe? Is this effective?

DISCUSSION:

Complementary and alternative medicine practices pose a particular challenge for the Western medicine trained physician. According to the findings in the National Health Interview Survey of 2012, 33.2% of adults and 11.6% of children used some form of complementary or alternative medicine in the preceding year. The most commonly used category was natural products, defined as non-vitamin, non-

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mineral supplements. The prevalence of these types of practices necessitates that practitioners ask good questions, inviting open and respectful dialogue about health practices that the provider may not have previously been familiar with. A helpful diagram for how to consider engaging in complementary practices is detailed below:

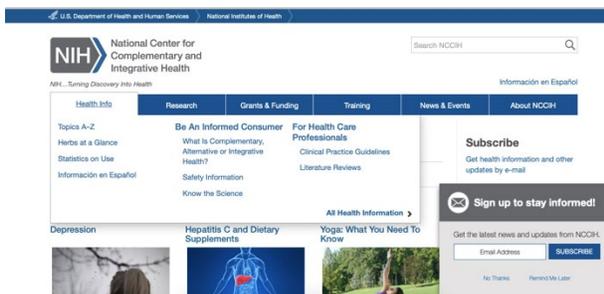
| | | Is the therapy effective? | |
|----------------------|-----|-------------------------------|------------|
| | | Yes | No |
| Is the therapy safe? | Yes | Recommend | Tolerate |
| | No | Monitor closely or discourage | Discourage |

Kemper K, Cohen M. Ethics meet complementary and alternative medicine: new light on old principles. *Contemp Pediatr.* 2004;21:65

While well-designed studies on complementary and alternative medicine practices can be difficult to find, there are a few excellent resources available to turn to for more information. A few examples are included below:

NATIONAL CENTER FOR COMPLEMENTARY AND INTEGRATIVE HEALTH: <https://nccih.nih.gov>

This is an open-access website compiled by a branch of the NIH for scientific research on systems, products, and practices considered outside of conventional medicine. This website includes brief summaries on most popular complementary practices including what is known about safety and efficacy. Additionally it provides links to existing primary scientific studies and reviews of current literature as available on a wide variety of topics.



NATURAL MEDICINES DATABASE: <https://naturalmedicines.therapeuticresearch.com>

This is an incredibly detailed evidence-based and peer-reviewed resource on natural products. It includes information on uses, various names of products, possible dosing, potential drug interactions

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and some information on safety in cases of lactation and pregnancy. This does require a subscription, but is often available through academic centers library services.



INFANT RISK CENTER: <https://www.infantrisk.com>

The infant risk center focuses on research in the area of medicines during pregnancy and breastfeeding. There are two smart phone apps available through this group out of Texas Tech University Health Science Center: one geared toward patients and families and one geared for providers. Available information included on this resource are half-life of products, bioavailability, and an overall lactation “risk” rating for each drug or supplement. There is also a nurse hotline available through the infant risk center Monday-Friday 8am-5pm CST for free consultation on medicines or supplements and their known risk in lactation.



BACK TO THE CASES

CASE 1: CHAMOMILE

Common Names: chamomile, German chamomile

Latin Name: *Matricaria recutita*, *Chamomilla recutita*

Background: Chamomile has been around since antiquity. Chamomile is used as an herbal supplement for sleeplessness, anxiety, and gastrointestinal discomfort. It is also used topically for a variety of skin conditions. Its small white flowers are used to make teas or tinctures, taken orally in a capsule, or used topically on the skin.

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Efficacy: Chamomile is not well-studied in humans, but some preliminary studies suggest it may be helpful for generalized anxiety disorder when taken orally. Other research studies have found it useful in combination with other herbal remedies in the symptomatic relief of colic and gastrointestinal discomfort, but chamomile hasn't yet been shown to be effective for this on its own.

Safety: As with any natural product, there is a risk of allergic reaction to chamomile. NCCIH indicates that there is increased risk of chamomile sensitivity or allergy in individuals already allergic to ragweed daisies, chrysanthemums, or marigolds. There have also been reports of interactions between chamomile and cyclosporine and warfarin.

CASE 2: MORINGA

Common Names: moringa, ben nut tree, drumstick tree, horseradish tree

Latin Name: *Moringa oleifera*

Background: This plant is native to India, Pakistan, Afghanistan and Bangladesh, but is now cultivated widely in the tropics of the world. Moringa is taken orally in the form of a dried medicinal tea, and is used most commonly for the treatment of anemia, malnutrition, osteoarthritis, menopause, and lactation support, among other things.

Efficacy: Overall there is insufficient evidence to recommend moringa's medicinal usage. Moringa is however a key component of many malnutrition programs in several parts of the world, and early research shows that adding moringa powder to food for 2 months results in increased weight gain in malnourished children. Another preliminary study showed that adding moringa dried leaves for 3 months to the food of menopausal women improved hot flashes and sleeping issues. Specifically related to its usage for breastfeeding and increasing breastmilk supply, the preliminary research evidence is mixed.

Safety: According to the classifications of safety used in the Natural Medicines database, moringa leaves, fruit, and seeds are considered "likely safe" when taken as food in adults. The leaves are considered "possibly safe" when taken by mouth as medicine for up to 6 months. The root and root extracts of moringa are "possibly unsafe" due to the presence of the toxin spirochin.

According to information available in Infant Risk Center's mobile application, *Moringa oleifera* is not recommended for use during pregnancy under the category of "Possibly hazardous: Human trials suggest risk, weigh carefully against benefits". However its use during breastfeeding is classified positively as "Safer: Benefits are likely to exceed risk".

CASE 3: TURMERIC

Common Names: turmeric, turmeric root, Indian saffron

Latin Name: *Curcuma aromatica*, *Curcuma domestica*, *Curcuma longa*

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Background: Turmeric is a root plant related to ginger with a yellow flesh comprised of curcuminoids, which are used either freshly peeled or dried in to powders to be consumed in capsules, teas, or tinctures. The powder can also be made in to a paste and applied topically for skin conditions. It has been used for centuries as a part of Ayurvedic medicine in South Asia, and is grown historically in other others parts of Asia and Central America. Today, turmeric is most often used in food preparation (for instance as a key ingredient in curry powder), or as a dietary supplement for the treatment of inflammatory conditions like arthritis, a naturopathic treatment for cancer, a tea for common cold symptom relief, or for other conditions.

Efficacy: There is a fair amount of research on the efficacy of turmeric, including many human subject studies. Preliminary studies showed that curcuminoids may reduce the number of myocardial infarctions in post-operative bypass patients and was found to be as effective in controlling knee pain from osteoarthritis as ibuprofen. A preliminary study of the effects of turmeric as a topical preparation showed that it may reduce some of the skin irritation occurring after radiation treatments for breast cancer.

Safety: Turmeric appears to be safe in the amounts tested in studies, but high doses or long-term oral use may cause some gastrointestinal upset.

REFERENCES:

1. "Chamomile." *National Center for Complementary and Integrative Health*, U.S. Department of Health and Human Services, 29 Nov. 2016, nccih.nih.gov/health/chamomile/ataglance.htm.
2. "Moringa Professional Monograph." *Natural Medicines*, 26 Nov. 2019, Moringa.
3. "Moringa oleifera." *InfantRisk mobile application*, accessed 4 Jan. 2020.
4. "Turmeric." *National Center for Complementary and Integrative Health*, U.S. Department of Health and Human Services, 27 Nov. 2018, nccih.nih.gov/health/turmeric/ataglance.htm.

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