



POTENTIAL ADVERSE REACTIONS FROM THE USE OF TEA TREE OIL, by Dr. Krista Lauer, Larada Sciences National Medical Director

GENERAL INFORMATION

Tea tree oil is also known as melaleuca oil.

Although they're natural, essential oils are not without the potential for serious medical adverse reactions. The FDA does not test oils for how well they work and their safety before they're sold, so there is a potential concern for contamination due to unlisted ingredients, or unsafe or unclean processing techniques.

The Tennessee Poison Center saw the number of toxic essential oil exposures double from 2011 to 2015.

ADVERSE REACTIONS

TOPICAL

When applied topically, Tea Tree Oil can penetrate the outer layers of the skin increasing the chances of toxicity due to dermal absorption. This toxicity is dose-dependent.

1. SKIN IRRITATION (CONTACT DERMATITIS)

The most common adverse reactions from the topical application of Tea Tree Oil include:

- Skin irritation
- Itching
- Stinging
- Burning
- Scaling
- Redness
- Dryness

Dermatologists say they frequently see patients who have contact reactions, including large blisters, after putting 100% essential oils directly onto their skin.



2. ALLERGIC DERMATITIS

Allergic dermatitis is an allergic skin rash.

Allergic contact dermatitis has been reported in about 5% of those who use tea tree oil. The cutaneous reactions range from mild contact dermatitis to a severe blistering rash.

3. ECZEMA

It is better for people with sensitive skin to stay away from tea tree oil as it could be harsh on sensitive skin. Also, anyone susceptible to eczema must use tea tree oil with extreme caution. It is recommended that people with eczema avoid its use altogether.

ENDOCRINE DISRUPTION

Tea tree oil might act as a potential endocrine disruptor. It has weak estrogenic and antiandrogenic properties in vitro studies. In vivo, evidence suggests that repeated exposure to tea tree oil may lead to gynecomastia (enlargement of a man's breasts) in young boys. According to a report published by The New England Journal of Medicine, the gynecomastia resolved in most cases post the discontinuation of the use of tea tree oil. Similar findings were published in a report by National Institutes of Health.

Some essential oils have hormone-like properties that studies suggest could harm children and pregnant women.

Many dermatologists advise against the use of essential oils in children and teens for the reasons listed above.



ALLERGIC REACTIONS

In addition to allergic dermatitis, allergic reactions include congestion, cramps, diarrhea, swelling, flushing, nausea, lightheadedness, and even anaphylaxis (which could be life-threatening).

Being allergic to cloves, guava, or eucalyptus can make one more susceptible to develop allergies to tea tree oil. The longer the tea tree oil has been allowed to age, the more likely it is to cause allergies.

INGESTION

Tea tree oil is toxic when swallowed. Serious side effects can occur, including:

- Confusion
- A lack of muscle control or coordination of voluntary movements (ataxia), leading to unsteadiness, inability to walk
- Decreasing levels of consciousness, or in severe cases, coma

Oral intake of larger amounts of certain oils, like tea tree oil, can lead to throat swelling, a racing heart, vomiting, and even seizures.

DRUG INTERACTIONS

Tea tree oil might interact with several drugs. These include:

- some medications for cancer
- agents that affect the nervous system
- medications that decrease immunity
- antibiotics
- anti-inflammatory agents
- antiviral agents
- hormonal agents
- anti-acne medications
- certain herbs and supplements
- medications used for parasite infections



REFERENCES

1. WebMD- Article 8/8/2017
2. <https://www.patientcareonline.com/skin-diseases/allergic-contact-dermatitis-tea-tree-oil>
3. Mayo Clinic
4. <https://www.stylecraze.com/articles/serious-side-effects-of-tea-tree-oil/#gref>