Can Essiac Help Combat Parasites (Schistosomiasis)?

Parasitic infections tend to go unnoticed for years until they cause severe health problems. The symptoms are often neglected and the treatment options are limited. But can parasites actually cause cancer? And can herbs in Essiac help combat parasitic infection? Read on to find out.

Disclaimer: This article is for informational purposes only. Please discuss your health concerns with your doctor. The FDA has not approved Essiac for treating cancer or any other medical condition. Essiac is sold as a herbal dietary supplement.

What is Schistosomiasis?

Sources of infection & symptoms

Schistosomiasis is an illness from infection with parasitic worms called schistosomes (usually *Schistosoma mansoni*, *S. haematobium*, and *S. japonicum*).

According to the <u>CDC</u>, schistosomiasis is the second most devastating parasitic disease, right after malaria. It is spread by contaminated fresh water in which certain types of snails that carry the parasite live.

Schistosomiasis infects over 200 million people per year, mostly in the Middle East, Africa, and Asia. This tropical disease is considered neglected by the World Health Organization. It seems to slip through the cracks of modern medicine, and only a few drugs are available to treat it.

The infection starts silently. A flatworm finds its way through the skin of someone who comes in contact with contaminated water. The parasites may keep on penetrating the skin or lie dormant for years before a person starts feeling sick.

Fatigue, fever, headache, and mild acute symptoms may progress to chronic infection. The eggs of adult worms travel to the intestine, liver, lungs, or bladder. There, they cause circulation problems, inflammation, or scarring. In rare cases, the eggs are found in the brain or spinal cord and can cause seizures, paralysis, or spinal cord inflammation (Nelwan, 2019).

Treatment & complementary herbal preparations

The only drug available to treat schistosomiasis is praziquantel.

Herbs used in traditional medicine, such as wormwood and myrrh, are also being investigated. Some herbs that are found in Essiac have gone through limited, preliminary studies (Mravčáková et al., 2020; Yakoot, 2010).

All herbal remedies for parasitic infections are typically used alongside conventional treatment based on anecdotal data. There is not enough clinical evidence to determine their safety and efficacy.

With parasites, the main goal is to remove the source of infection and create more hygienic living conditions.

Cleansing parasites with medicine (conventional or alternative) won't solve anything if the person still comes into contact with contaminated water or food on a daily basis.

If you think you have parasites, consult your care provider to get adequate diagnosis and treatment.

The Link Between Parasites & Cancer

Can parasites cause cancer?

Certain parasitic worms can raise the risk of developing cancer. They are classified as definite biological agents that cause cancer (Hatta, 2021).

It's important to point out that not all parasites cause cancer, although all parasites are detrimental to health. Also, claims that all cancers are parasitic or that everyone has parasites have no basis in evidence.

Over time, infection with some parasites may lead to excessive oxidative stress and inflammation. As the parasites spread throughout the body, they can cause widespread injury to organs and tissues. They also secrete toxins that disrupt cellular and immune health, weakening the body's innate defenses (<u>Hatta, 2021</u>).

Schistosomiasis and bladder cancer

Schistosomiasis has been linked to bladder cancer. Links to other types of cancer are being studied as well.

The parasite causing schistosomiasis releases cancer-causing toxins into the body (N-nitroso compounds). In chronic stages of the disease, it also decreases the activity of carcinogen-detoxing enzymes (Mostafa et al., 1999).

Since the body can't cleanse toxins, carcinogenic compounds build up. Inflammation becomes rampant and oxygen radicals increase, causing DNA damage. All these mechanisms contribute to an increased risk of bladder cancer in patients with schistosomiasis (Mostafa et al., 1999; Hatta et al., 2021).

Other parasites

Opisthorchis viverrini and **Clonorchis sinensis** are liver flukes (a type of flatworm) that have been linked to an increased risk of developing cancer of the bile ducts. People get infected by eating raw or undercooked freshwater fish, mostly in East Asia.

Eating raw, contaminated fish frees these parasites into the body. They travel toward bile ducts, trigger inflammation, damage DNA, and cause gene mutations that can eventually lead to cancer. The risk increases in combination with other carcinogenic factors such as dietary nitrosamines (found in salted or fermented fish, a common dish in southeast Asia) (<u>Hatta et al., 2021</u>).

Other types of common parasites that can cause health problems include roundworms, hookworms, pinworms, whipworms, and more. These, however, haven't been specifically linked to cancer.

The Evidence on Using Essiac for Parasites (Schistosomiasis)

Not many plants have been studied against schistosomiasis and other parasites. A couple of studies investigated the two dominant constituent plants in Essiac: burdock root and sheep sorrel herb.

Burdock

Scientists think that active compounds in burdock root and fruit may show potential as new antiparasitic drugs.

In one study, the main active compound from burdock root—arctiin—killed schistosomes (*S. mansoni*) in culture, damaging their outer protective surface. In infected mice, high-dose arctiin injections (but not lower-dose oral use) reduced the parasitic liver burden, possibly by lowering inflammation (<u>Saco et al., 2017</u>).

In another cellular study, alcoholic burdock fruit extract killed 100% of *S. mansoni* worms. The scientists suspect that arctiin and arctigenin from burdock were responsible for the antiparasitic effect (Dias et al., 2017).

One research team proved that active compounds from burdock fruit can kill a parasite called *Dactylogyrus intermedius* in goldfish. These parasites mostly infect farmed fish. The same team used gold nanoparticles to trace how arctigenin kills parasites by entering deep into their nucleus or mitochondria. Yet, only the chloroform extract had antiparasitic activity (<u>Tu et al.</u>, 2018; <u>Tu et al.</u>, 2020).

Arctigenin derivatives were also active against the parasite that causes toxoplasmosis (*Toxoplasma gondii*) in cells and in mice (<u>Zhang et al., 2018</u>).

Also, the whole burdock plant can be given as organic parasite control for farmed poultry and rabbits (<u>Lans and Turner, 2011</u>).

Sheep sorrel

Sheep sorrel is also considered to be an anti-parasitic herb. It's used to combat parasites in traditional Iranian and Middle Eastern folk medicine. Nordic farmers also give sorrel species to livestock to combat internal parasites (Amiri et al., 2014; Waller et al., 2011).

Sheep sorrel is exceptionally high in the antioxidant quercetin. Quercetin killed the following parasites in culture: *G. lamblia*, *Haemonchus contortus* larvae, *Leishmania donovani*, *Trypanosoma brucei rhodesiense*, *Trypanosoma cruzi*, and *Encephalitozoon intestinalis* (Calzada et al., 1999; Panda & Lyten, 2018).

Quercetin improved parasitic infections in mice, and some scientists believe it's a potent antiprotozoal agent. Protozoa are a type of single-celled parasite (<u>Calzada et al., 1999</u>; <u>Panda & Lyten, 2018</u>).

Other Essiac active compounds

Many other flavonoids that are found in Essiac are also being researched for their antiparasitic activity (Panda & Lyten, 2018).

Tannins are another class of antiparasitic actives found in all four Essiac constituent herbs, although tannins are most concentrated in sheep sorrel leaves and slippery elm inner bark (Korpelainen & Maria Pietiläinen, 2020; Joo, 2014)

Tannin-rich plant extracts, including sorrel leaf extract, killed the larvae of *Toxocara cati* and *Trichuris vulpis* parasites in one study. These parasites usually affect cats and dogs, but humans can get infected as well (Spiegler et al. 2015).

According to some estimates, up to 13% of the US population is infected with *Toxocara* parasites. Toxocariasis is the most neglected infection of poverty in the U.S. (<u>Farmer et al., 2017</u>).

Detox and immune support

In addition to the possible direct antiparasitic activity, Essiac may also help by (<u>Ruiz et al., 2021</u>; <u>Leonard et al., 2006</u>; <u>Cheung et al., 2005</u>; <u>Seely et al., 2007</u>):

- Reducing oxidative stress
- Preventing DNA damage and genetic mutations
- Supporting detox
- Cleansing and soothing inflammation
- Providing immune support

Read more about the science-backed benefits and dosage of Essiac in this post.

Not sure which Essiac formulation is right for you? Dive into this article.

In Conclusion

Certain types of parasites have been linked with cancer. Chronic parasitic infection can cause inflammation, oxidative stress, immune imbalance, sluggish detox, and DNA damage. However, not all types of parasites increase the risk of cancer.

The treatment options for most types of parasitic infections are limited. New research is exploring herbal extracts but is still in the early stages. Herbs in Essiac that show the most promise as natural antiparasitic agents are burdock and sheep sorrel.

Despite promising preclinical research, however, clinical studies are needed before Essiac or its constituent herbs can be recommended to people with parasitic infections.

Essiac can be taken to support overall health and immunity, which may help alongside conventional treatment.