

Human Brain Parasites: Don't Look Away

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STORY AT-A-GLANCE

- › Brain and CNS parasitic infections are more common than we think
- › Close to 3 billion people worldwide are thought to be infected by *Toxoplasma gondii* alone
- › In Australia, unsuspecting doctors have extracted a live parasite known to infect carpet pythons out of a patient's brain
- › There is a number of parasites that can infect the brain and the CNS, some are not easy to diagnose
- › There is most certainly no "one size fits all" cure, and it is very likely that the epidemic of dementia and neurological issues is in part a result of undiagnosed infections in the CNS and the brain (bacterial, fungal, parasitic, etc.)
- › Certain plants are known for their antimicrobial, antiparasitic and antifungal properties, and some of them can cross the BBB (blood-brain barrier)

This story is about parasites that can live in the human brain. The point of this story is not fear but an exploration of what may be impacting us as we look the other way.

To a regular westerner, the brain is a clean, protected place. Most people would find it sacrilegious that to parasites, human brain is fair game – and that to them, it's just another "terrain." In the West, many are trustful of the official sanitary norms. We don't have a culture of regularly using antifungal and antiparasitic spices and herbs. And if

you are in New York, as I am – you would see that there is also a lack of basic, common sense hygiene (sad-looking masks aside).

In the past few years, it has been discovered that even the healthy human brain may not be sterile.¹ It has also been found that the gut microbiome significantly influences brain function,² and some researchers have looked into the brain microbiome per se.³

When it comes to brain-residing parasites, they are far more prevalent than most people think – and that's based just on what has been diagnosed. At least three billion people in the world are infected with the protozoan parasite *Toxoplasma gondii* alone,⁴ including 40-60 million people infected in the United States – and the actual number could be higher due to the limitations of the commonly used blood tests.

Personally, I believe that bacterial, fungal and parasitic infections of the CNS are a major **contributor** to dementia, autism, psychiatric disorders, and many other contemporary maladies for which the "learned men" have invented extremely fancy syndrome names – and that they treat with very lucrative pharmaceutical drugs that do not fix the root cause.

For example, just recently, a study was published that looked at about 600 seniors and drew a statistically significant correlation between the biomarkers of frailty and *Toxoplasma gondii* seropositivity. I wrote about it in detail [here](#). That particular parasite is **linked** to a plethora of diseases, from neurological issues, to heart problems, psychiatric disorders, etc.

A Rare Case of a Carpet Python Parasite Extracted From the Human Brain

Not so long ago, Australian doctors **extracted** a live helminth, not known to be infectious to humans, from a woman's brain. The results were published in the journal in the journal *Emerging Infectious Diseases* in 2023.⁵

"A parasitic roundworm typically found in snakes was pulled 'alive and wriggling' from a woman's brain in a stomach-churning medical first, Australian doctors said ... The woman, who had been treated for but not fully recovered from pneumonia, was admitted to a hospital in January 2021 after three weeks of abdominal pain and diarrhea, which progressed to a dry cough and night sweats ...

She was re-admitted to a hospital three weeks later when her condition did not improve, and underwent various treatments until brain scans revealed a lesion and an open biopsy was performed in June 2022."

*"Baffled doctors performed an MRI scan on the 64-year-old Australian woman after she began suffering memory lapses, noticing an 'atypical lesion' at the front of her brain. It was an eight-centimetre roundworm, called *Ophidascaris robertsi*, which researchers said was a common parasite in kangaroos and carpet pythons - but not humans. 'This is the first-ever human case of *Ophidascaris* to be described in the world.'"*

Now let's look at some of the more common parasites that are known to infect the brain and the CNS.

Angiostrongyliasis

Recently, in the southern United States, there has been a surge of angiostrongyliasis, a parasitic infection caused by *Angiostrongylus cantonensis*. *Angiostrongylus* is a parasitic nematode that can cause severe gastrointestinal or central nervous system disease. This parasite, that is also known as the rat lungworm, may cause eosinophilic meningitis. It is prevalent in Southeast Asia and tropical Pacific islands.

Infections have also been identified in Africa, in the Caribbean, and in the United States.⁶ Recently, it has been reported in Texas, Louisiana, Alabama **and Florida**, as well as Atlanta.⁷

Infection can happen through ingesting contaminated food like fresh produce or escargot. The larva of this parasite can migrate to the brain. The parasite can't reproduce inside humans but it can cause nausea, vomiting, neck stiffness, headaches, sometimes arm and leg tingling, and in rare cases, **coma and even death**. It is also possible for people to experience no symptoms during the first several weeks of infection but then develop neurological symptoms later.

According to our beloved CDC, the diagnosis of this parasite can be difficult,⁸ which sadly tends to be the case for many of the brain-infecting parasites.

Neurocysticercosis

Cysticercosis is a "potentially fatal parasitic infection caused by the larval form of *Taenia solium* [pig tapeworm]. Patients with symptomatic disease usually have signs and symptoms of neurocysticercosis, which commonly manifest as seizures or increased intracranial pressure."⁹ This parasite is considered to be a significant factor contributing to epilepsy worldwide.

Human infection with this parasite may happen in two forms. One is "primary hosting," and it happens as a result of eating under-cooked pork that contains the cysts that develop into adult worms in the intestines. The adult worm has a flat, ribbon-like body and measures 6' to 10' long or more. This form is often asymptomatic and is easily treated with anthelmintic medications.

The other form, "secondary hosting," called cysticercosis, is due to eating food or drinking water, contaminated with feces from a person infected by the adult worms, which leads to ingesting the tapeworm eggs, as opposed to cysts. The eggs then develop into cysts, primarily in the muscles. Some people may develop obvious symptoms as well as develop parasite cysts in the brain.¹⁰

"Human primary hosting is best diagnosed by microscopy of eggs in stool. In secondary hosting, it may be possibly diagnosed using imaging techniques such as computed tomography and nuclear magnetic resonance. Blood samples can also be tested using

antibody reaction of enzyme-linked immunosorbent assay ... Common symptoms of neurocysticercosis include seizures, headaches, blindness, meningitis and dementia."^{11,12}

Toxoplasmosis

Toxoplasmosis is a disease caused by *Toxoplasma gondii*, a protozoan parasite that is famous for making infected rats attracted to cats. I wrote about this parasite – including the latest research that turns some of the conventional concepts upside down, [here](#).

- *"At least one third of all people on Earth are infected with the parasite *Toxoplasma gondii*, averaging from 11-20% in the United States to 50% and higher in some Western European countries"*
- *The parasite has been implicated in ocular issues, schizophrenia, epilepsy, Alzheimer's disease and various other neurological disorders, as well as in heart disease, pneumonia, recurrent headaches, even cancer; it is also known for causing psychological changes in its hosts*
- *While the official word is that most toxoplasma infections are harmless and asymptomatic, the impact of the parasite could be much more devastating than the current mainstream medical convention presumes; it may also be cross-reacting with the spike protein and possibly contributing to the mystery of 'long COVID'*
- *According to recent research and clinical evidence, toxoplasma tissue cysts, previously considered harmless in immunocompetent patients, are capable of causing major health issues without converting to the cell-blasting form*
- *Commonly used antibody tests can only detect antibodies for the 'tachyzoite' (cell-blasting) form of the parasite but not the 'bradyzoite' (tissue cyst) form*
- *Dr Uwe Auf der Straße in Germany has done an important clinical investigation of the parasite, and his findings could shed light on 'mystery'*

symptoms in many patients"

In 2014, when the world's population was just over seven billion, two billion were thought to be infected with the parasite based on conventional serology alone.¹³ Today, it is believed to be at least three billion people and possibly a lot more.

Trypanosomiasis

Trypanosomiasis, or sleeping sickness, is caused by another kind of protozoan parasites, most often *Trypanosoma brucei* or *Trypanosoma cruzi*. American trypanosomiasis (Chagas disease) is transmitted by the assassin bug. African trypanosomiasis is spread by the tsetse fly.¹⁴

The parasite may live inside the host for years and eventually spread from the blood to the brain, leading to meningoencephalitis and swelling. The person can experience headache, difficulty thinking, personality changes, and movement disorders such as tremor or lack of coordination.¹⁵

Without treatment, the disease is considered to be fatal. The disease is diagnosed based on antibodies or by evaluating a sample such as cerebrospinal fluid under a microscope.^{16,17}

Cerebral Malaria

Cerebral malaria is "the most severe neurological complication of infection with *Plasmodium falciparum* ... Surviving patients have an increased risk of neurological and cognitive deficits, behavioral difficulties and epilepsy," making cerebral malaria a leading cause of childhood neuro-disability in sub-Saharan Africa.¹⁸

Cerebral malaria is most common in areas where malaria is endemic, such as in Africa. Cerebral malaria can cause changes in consciousness and seizures. Without treatment, the disease may progress to coma or death. With treatment, mortality is reported to be between 15% to 20%.^{19,20}

Schistosomiasis

Schistosomiasis, also known as bilharzia or snail fever, is a disease caused by parasitic flatworms called schistosomes or blood flukes, who spend part of their lifecycle in freshwater snails. Most human infections are caused by *Schistosoma mansoni*, *S. haematobium*, or *S. japonicum*.²¹

People who come in contact with larvae-contaminated water may become infected if the larval worms penetrate the skin, travel to blood vessels, and develop into adults. The worms adhere to the wall of the blood vessel, where they can live for up to 30 years.²² The release of eggs from female worms triggers various symptoms, such as abdominal pain, diarrhea, and blood in the urine. Chronic infections frequently result in serious damage to the liver, intestines, and bladder.²³

The worms can spread to the spinal cord, resulting in myelopathy, which causes symptoms such as pain, urinary retention, weakness of the regions below the level of infection, or even paralysis.²⁴ The parasite can affect the brain, resulting in elevated intracranial pressure or epilepsy.²⁵

Echinococcosis

Echinococcus is a tapeworm that can cause cysts in living human tissue including the brain and spinal cord. The parasites which are responsible include *Echinococcus granulosus* and *Echinococcus multilocularis*.²⁶ Cystic echinococcosis, also known as hydatid disease, is caused by infection with the larval stage of *Echinococcus granulosus*, a 2-7 millimeter long tapeworm found in dogs (definitive host) and sheep, cattle, goats, and pigs (intermediate hosts).²⁷

Cystic echinococcosis is mostly found in South and Central America, Africa, the Middle East, China, Italy, Spain, Greece, Russia, and the western United States (Arizona, New Mexico, and California). The worm's incubation period is usually long and can be up to 50 years.²⁸

Most infections in humans are considered asymptomatic. However, "asymptomatic" in this case may mean that the cysts may be growing very slowly over the years (in the liver, in the lungs, in the brain, etc.) and be neglected until the symptoms become hard to ignore.

The symptoms that develop depend on the location and size of the cysts. In the brain, the cysts can lead to seizures and elevated intracranial pressure.²⁹ In the spinal cord, they can cause spinal cord compression and paralysis. Infections of the central nervous system are considered more rare than the infection of other organs, such as the lungs or liver.³⁰

One becomes infected when he ingests food or water that contains the parasite eggs or by close contact with an infected animal. Cysts are detected with ultrasound, computed tomography, or other imaging techniques. Antiechinococcus antibodies can be detected with serodiagnostic tests – indirect fluorescent antibody, complement fixation, ELISA, Western blot, and other methods.³¹

Paragonimiasis

Paragonimiasis is a parasitic disease caused by several species of lung flukes belonging to genus *Paragonimus*.³² One can get infected by eating crustaceans like crabs or crayfishes that host the infective forms of this parasite called metacercariae, or by eating raw or undercooked meat of mammals harboring the metacercariae.³³ Paragonimiasis is easily mistaken for other diseases with which it shares clinical symptoms, such as tuberculosis and lung cancer.³⁴

Most commonly it is found in East Asian countries. It is rare in the United States, though several cases have been reported in the Midwest.³⁵

The adult form of the parasite both releases inflammatory substances and moves through human tissues. In rare cases, it may infect the brain either through the bloodstream or through the foramina at the base of the skull.^{36,37}

Trichinellosis

Trichinosis, also known as trichinellosis, is a parasitic disease caused by roundworms of the *Trichinella* type. Several species of *Trichinella* can cause disease, with *T. spiralis* being the most common. The initial symptoms are diarrhea, abdominal pain, and vomiting. Some infections are considered to be asymptomatic.

As larvae migrate to muscle, which occurs about a week after being infected, it may result in swelling of the face, inflammation of the whites of the eyes, fever, muscle pains, and a rash. Serious infections may lead to inflammation of heart muscle, central nervous system issues, and inflammation of the lungs.³⁸

Trichinosis is typically acquired by eating undercooked meat containing *Trichinella* cysts. In North America this is typically bear meat but pork and boar meat can also be infected.³⁹ Upon ingestion, the larvae get released from their cysts in the stomach, invade the wall of the small intestine, where they develop into adult worms.

After one week, the females release new larvae that migrate to voluntarily controlled muscles, where they form cysts. The diagnosis is usually based on symptoms and confirmed by finding specific antibodies in the blood, or larvae on tissue biopsy.⁴⁰ The parasite can cause meningitis and encephalitis. A CT scan may show cystic lesions in the brain.⁴¹

Diagnosics of Brain Parasites: A Challenge

Here's the kicker. While parasitic infections seem to be a lot more common than we assume, including symptomatic infections of the brain that impact the elderly and the immunocompromised, we do not have a solid way to easily and comprehensively diagnose many CNS parasites.

There are antibody tests that sometimes work. There are imaging techniques. There are invasive methods like spinal tap – but usually it boils down to persistence and luck. How open-minded is the doctor? How far is he or she willing to go to investigate? How

accurate are the tests for a given parasite? All those things are a matter of persistence and luck.

Conclusion and Hope

There is a philosophical underpinning to the story. In the olden days, people lived slowly, in relative harmony with nature. Our ancestors spent a lot of time outside, had robust microbiomes, and knew about medicinal herbs. Nature wasn't poisoned. Human bodies weren't poisoned. We had all the richness of our God-given natural immunity available to us.

In the world of today, we are blessed with a lot of comforts and a lot of sweet toys – and it's a beautiful thing. But we are also paying the price.

All the massive poisoning, all the stealing of natural freedoms led us to where we are. Our collective health is a mess. Our bodies are poisoned. Our aspiring masters, Blackrock investors and the like, have a very tight grip on what we eat and how we treat disease.

As a result, we are faced with a spiritual journey, in which we are almost on our own. We are faced with an opportunity to learn from scratch, to think, to explore.

For example, in the context of brain infections, there is a nose-to-brain pathway. There are substances that are known, in general terms, to counter parasites. For example, certain plants, like thyme, pine, or rosemary, are reported to have an antiparasitic and antimicrobial effect.^{42,43} Those can come in the form of essential oils and be inhaled, with care.

Cinnamon is also known for its broad antimicrobial and antifungal properties.^{44,45} Incidentally, it is being researched as a treatment against Alzheimer's disease⁴⁶ and MS.⁴⁷

It may be good to look into those things before big pharma takes over and makes us take **intranasal vaccines!** There is also curcumin that is known to have anti-inflammatory

properties and to [cross the brain-blood barrier](#).

I believe that there is no "one size fits all" cure, and that it is very good to talk to a doctor who is knowledgeable and has an open mind, and it is certainly beneficial and potentially life-saving to do all available tests and go from there. But it is also very good to start on a spiritual journey and get back to our roots. It can't hurt.

About the Author

To find more of Tessa Lena's work, be sure to check out her bio, [Tessa Fights Robots](#).

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