



GENERAL ACUPUNCTURE

Facebook Cuties and Parasites

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When I see Facebook videos about babies and small animal pets, I have no hesitation to click "like." These are two Facebook cuties, before which people would have their hearts melted down, especially those new parents. Some find the interaction between these two cuties is even more appealing. With the mother giggling in the background, a little dog is washing the face of a toddler with its saliva or a baby is sharing food with a beautiful kitten. I have contributed numerous "likes" to these two Facebook cuties, but in spite of this, my stomach starts churning with this kind of intimacy because it displays a doomy picture of the parasite infection in my mind.

A human body can host more than a hundred different types of parasites. Some are microscopic in size, needing a microscope to identify, others can be as long as the human colon and as thick as a pencil. Many people in the U.S. get infected through their animal pets.

Parasite infection is one of the most serious illnesses in the world, a large number of people are suffering from it and their health is greatly compromised. According to the CDC (Centers for Disease Control and Prevention), parasitic infections affect millions of people in the U.S., and more than 60 million people are chronically infected with *Toxoplasma gondii*, a protozoan that causes the Toxoplasmosis infection. This type of parasite is known to affect nearly all the warm animals and humans. At the early stage, the infected human can have no symptoms, however, mental illness, fever or blindness and epilepsy are the possible consequence of infection. A parasite infected pregnant woman can pass down the disease to the newborn. Once infected with *Toxoplasma gondii*, people are generally infected for life, their immune system and health may greatly degrade over time.

Cats are recognized as the primary host of *Toxoplasma gondii*, oocyst is the parasitic organism with environment resistance that can be found in a cat's feces. When a human baby accidentally ingests the parasite, it enters into the body system and becomes contaminating, moving to different parts and

organs of the body. Parasites may penetrate into the liver, muscle and central nervous system. Adults can also get infected by cleaning an infected cat's boxes.



Toxocariasis is a parasitic infection caused by the roundworms that are commonly found in the intestine of dogs (*Toxocara canis*). The dog owners, particularly young children, have much higher chance to get infected with *Toxocara*. A study indicates that close to 14% of the U.S. population has the antibodies to *Toxocara*, this suggesting a large number of Americans have been exposed to the parasites in their life. Puppies usually contract of the parasites from the mother dogs before birth or from her milk. The larvae grow rapidly in the puppy's intestine and start polluting the environment with their parasitic feces in just a couple of weeks. Children and adolescents under the age of 20 are more likely to test positive for this parasite infection.

The CDC lists Toxocariasis and Toxoplasmosis in the NPI (Neglected Parasitic Infection) group, a group of parasitic diseases that have been targeted by the CDC as priorities for public health action. These infections are considered neglected because relatively little attention has been devoted to their surveillance, prevention, and/or treatment. Conventional drugs are usually more effective in treating the parasites infection than alternative medicine, however acupuncturists and TCM practitioners still have huge opportunities to make a considerable contribution to dealing with parasitic pests. The Nobel Prize Laureate Tu Yuyu has provided an example and the inspiration. TCM professionals can and have succeeded in working abreast with the top medical scientists in helping and saving millions of lives.

The issue of parasites infection has been around as long as the human history. TCM has thousands of formulas and individual herb ingredients that help kill the different types of parasites.

Tai Ping Sheng Hui Fang also is referred to as <Sheng Hui Fang> AD. 976 — 984: "Human parasites

are found in the spaces between internal organs, if the visceral *qi* is strong and substantial, no symptoms will show. If not so, parasites will start eroding and invading organs. As the parasites grow and develop, all the disease symptoms will emerge."(Translated version) At the early stage of the parasites infection, the autoimmune system does not fire at the parasitic microorganism invasion, but make peace with them instead. The infected hosts are not alerted and the normal life style goes on. As the time passes by, the immune system or visceral *qi* gets weakened, the growing worms will launch attacks in the most terrible way, bringing the host with the long term sufferings both physically and mentally.

Treaty on Typhoid Fever-JueYin AD.200-210 authored by Zhang JinZhong: "A seriously infected with the roundworms patient spits out the parasites, shows the sign of being quiet and dysphoria alternatively, this is so called dirty cold. At the time the roundworms invade the diaphragm that causes irritation to the patient who quiets down in a minute. When the patient eats food, starts vomiting, and becomes irritated, this is due to the parasites smell the food and come out for it. Such patients often through up with the parasites. Should be treated with Wumei Pill." (Translated version)

The hookworms are called "lurking worms" in a TCM classic work (General Treatise on the Cause and Symptoms of Diseases AD 610), and "lurking worms" are deemed as "the most harmful parasite of all." When a human accidentally makes contact with the hookworm larvae (immature worm), the powerful hooks of the larvae hold firmly to the skin and secure the infection. Once in the human system, larvae travel in the blood stream, some settle down in the small intestine, some immigrate into the large intestine. Hookworms not only quietly steal the food and the nutrition, but also suck blood from the intestine walls, causing serious anemia to the host. Patients may have tremendous appetites, but at the same time they keep losing weight and their general health gradually gets degraded and compromised. Some may develop a symptom called allotriophagy, in which patients secretly start eating non-edible substance such as dirt or even pesticides. In the TCM perspective, patients usually have chronic fatigue, sallow facial complexion, weak pulse and pale tongue. The treatment approach should be tonifying the blood, vigorating the spleen to expel the dampness and parasites, regulating *qi* and normalizing the middle warmer. PinWeiSan (Powder for Regulating the Function of Stomach) is the formula to use. While the extra potent conventional drug is the first choice to treat the hookworm infection, TCM formulas and herb medicine can be used in stages aftermath, to rebuild and maintain the health of a patient.

Parasite infection is obviously a serious health threat to our communities. Acupuncturists and TCM practitioners have no excuses but to join and take an active part in the campaigns launched by the CDC. I personally believe that anyone of us can do one or possibly all of the tasks listed by CDC as follows:

- Increase awareness among physicians and the public.
- Synthesize the existing data to help better understand these infections.
- Improve diagnostic testing.
- Advise on treatment, including distributing otherwise unavailable drugs for certain infections.

References:

1. www.cdc.gov
2. www.cdc.gov/parasites/toxocariasis/epi.html

