Infrared Heat and Cancer  
By Dr Kathie M Black PhD

Cancer and Infrared Heat

An ancient Greek doctor named Parmenides stated, “Give me a chance to create fever and I will cure any disease” (Hancock, 2003). Cancer continues to be one of the top killers in modern society. Cures for cancer are rare, intrusive, and painful. Receiving a diagnosis of cancer can put any family into a tailspin of fear and apprehension for the future. Cancer foundations abundantly dot the number of organizations striving to find cures for virtually any diagnosed type of cancer. Multiple therapies emerge seemingly daily. The three common major forms of therapy include chemotherapy (invasive, debilitating, frightening), radiation (the same), and surgery along with a multitude of alternative therapies from shock therapy to photo therapy to nutritional supplements and herbal supplements to help the body rid itself of malignant cells and tumors. Holistic cancer treatments work on strengthening the entire immune system and killing off toxic cancer cells through such interventions as diet modifications, anti-cancer herbs, and nutritional supplements. Even positive mental imagery helps the cancer patient work toward eliminating the enemy within. One thing all modalities agree upon is that cancer cells cannot survive heat. Infrared heat becomes a “hyperthermic” treatment that artificially raises the body temperature allowing the body to literally burn out cancer cells. Malignant cancer cells are more sensitive to heat than healthy cells. Hyperthermic treatment consists of heating the body either in the local area of the cancer cells or tumor, regional sections, or by treating the entire body. Short & Turner (1980) found that hyperthermic treatments were especially successful in killing cells that radiation or chemotherapy previously were unable to kill, thus making a combination therapy of chemo, radiation, and hyperthermia desirable.

Infrared waves penetrate the skin past the epidermis into the dermis (outer skin layer to inner skin layer) of depths of approximately 3/4 to 1/5” (inches) (6-8cm or 1.0-2.5mm). This deeper penetration of heat into the skin results in increased action of the cell structure releasing water and toxins. With the build up of chemo chemicals in the system, this rapid warming and releasing of water molecules and toxins, aids in a quicker reduction of chemicals in the body system. Far-infrared therapy has the ability to break the protective rings around harmful molecules so the cancer cell can no longer survive. It also weakens the bonds between toxins and human tissues allowing the flushing of stored toxins out of the system faster and in greater quantities through sweating and excretion. Cancer patients, on average, have a higher load of toxins than healthy individuals, making the importance of flushing toxins from the system doubly important (ICNIRP, 2006)..
Combining cancer treatment modalities appears to be the most effective means of treatment. There are a number of various natural methods to aid in helping individuals attack cancer in their lives; however, all patients should seek qualified, licensed medical professionals at the first sign or onset of any type of cancer and not try to self-diagnose or treat cancer without those qualified sources. The Phi Natural Health International Group (2004) present a variety of natural treatments to supplement the treatments already prescribed or administered to patients to maximize the healing potential of specific treatment regiments. This group agrees that there is substantial benefits to overheating cancer cells. They concur that cancer cells are damaged or weekend by temperatures of 42-43 degrees C, and that this overheating is harmless to active healthy cells. They recommend gradual overheating from temperatures of 42 to 47 degrees C over a period of weeks or months. Before embarking on such a treatment, the Chi group makes several cautions. They recommend that blood sugar levels be monitored closely to control tumor growth in the event the temperatures of treatment are not quite high enough. They also state, “Hyperthermia is said to be one of the safest, most efficacious and economical way of removing heavy metals and toxic chemicals from the body”. The group quotes from Dr. Paavo Airola’s 1984 book How to Get Well that hyperthermia gives cancer a “triple whammy” by:
1. Removing accumulations of stored toxic chemicals that cause cancer;
2. Improving circulation so that the tissues are both nourished with oxygen and flushed of acidic metabolic wastes; and,
3. Weakening or even killing cancer cells that have a lower tolerance for heat than healthy cells.

Finally, this group recommends hyperthermia as a way of preventing cancer through having a healthy lifestyle and using an infrared sauna to remove toxins on an ongoing basis. Kaltsas (2007) describes a form of hyperthermia treatments practiced at Klink St. Georg, a fully licensed hospital in Bad Aibling, Germany, outside of Munich. The clinic is set in the foothills of the Alps and treats about 5,000 cancer patients a year – half from Germany and the other half from all around the world. The clinic starts patients with a standard cancer protocol of a week of detoxification and strengthening of the immune system through diet and herbal supplements. They follow this by two to three weeks of hyperthermia treatment and low-dose chemotherapy. A typical treatment would involve heating the body in temperatures above 37 degrees C (10.6 degrees F) for approximately two to two and a half hours followed by a cool down of about an hour and a half or until the body temperature returns to normal. This regimen continues two or three times a week for up to three weeks depending on the type of cancer. The clinic watches vital signs and
organ functions with specific concern given to heart, lung, kidney, and liver functions throughout all their treatments.

Doctors and researchers at Klink St. Georg have found that there are three major ways that high temperatures kill cancer cells while at the same time increasing the potential of alternative diet and supplemental cancer therapies. The first is that heat increases the cellular metabolic rate by breaking down glucose to lactic acid to decrease pH to low levels putting the body into an acidic state called acidosis. Acidosis leads to hypoxemia, or low oxygen supply, which eventually deprives cancer cells of oxygen. The second benefit from heat is that with added glucose induces a temporary state of hyperglycemia (high blood sugars), which chokes cancer cells from a fresh blood supply. The third way heat works, in addition to increasing cell permeability, is by damaging the membranes surrounding cancer cells making them more vulnerable to anti-cancer agents such as chemotherapy and radiation. Studies have shown that when exposed to high levels of heat, cancer cells die faster at a fraction of the usual doses of chemotherapy and radiation. The Klinik St Georg uses hyperthermia treatments with the following cancers:

Breast
Uterine
Pulmonary and hepatic tumors
Pancreatic
Neuro-endocrine
Stomach
Bowel and bladder
Ear, nose, and throat
Brain
Lymph node
Local lymphomas
Skin cancers.

In addition to finding improved reaction to traditional therapies of chemotherapy and radiation, patients exposed to hyperthermic treatments have also noticed a marked lowering of pain resulting in a decrease of pain medications. The clinic recognizes that the killing of millions or billions of cancer cells leaves multiple toxins in the body that can be detrimental to the overall health of the patient, so they recommend efficient elimination of toxins from the body through a variety of methods – sweat being the optimal form of detoxification (Kaltsas, 2007).

The ICNIRP (2006), stated in their official statement said, “The medical use of infrared radiation has a long history. It has been widely used in physical medicine for treatment of sports injuries, muscle aches, pain, and some chronic diseases... In recent years there has been an interest in the use of IR-A sources for hyperthermic treatment of cancers” (633). Hancock, 2003, discusses the inability of cancer cells to survive in extreme heat.
There are several naturopaths, medical doctors, physiotherapists, and other health professionals using infrared saunas in helping their patients in cancer recovery. One naturopath working in Nanaimo, BC, Canada has several patients who have experienced drastic results and healing of their cancer-ridden sites after chemo and radiation by using an infrared sauna on a daily basis. Additional benefits of using infrared heat for cancer patients result in better pain relief, more restful sleep, improved circulation, and a boost to the body’s regenerative abilities.

References


