

Vaccine against cancer

Tijn Toubert

This article appeared in Ode issue: **36**

Oncologist Robert Gorter is seeing success in using patients' own "killer" cells to battle cancer. Ode visited his clinic in Cologne, Germany.

Six months. That was how long 59-year-old Joe Pacini was expected to live—at least according to the doctors who were treating him for pancreatic cancer. Pacini, who could barely walk, wrote his will and waited for the inevitable end. Then he got a call from his son, who had attended a lecture by Robert Gorter, a Dutch cancer specialist working in Cologne, Germany. Gorter, who studied at the University of Amsterdam and University of California medical school in San Francisco, had developed a new treatment for cancer that raised hopes for the family.

So Joe Pacini flew from the U.S. to Germany. After a single treatment, he was able to walk a little. Two days later, he no longer needed any pain medication. On the third day, Gorter suggested they might be celebrating his 80th birthday together.

Gorter's breakthrough came in 1999 when he developed a procedure to cultivate so-called dendritic cells, which play a key role in fighting off cancer cells. The method attracted international attention, causing quite a positive stir among his colleagues at the conference of the American Society for Clinical Oncology—the international symposium for cancer specialists.

He tested his findings in a study involving 171 women with metastasized breast cancer who had undergone many forms of chemotherapy and radiation treatment and were considered hopeless cases. Following Gorter's treatment, about 10 percent of the patients were in remission—a surprising result in patients considered terminal. In 60 percent of the women, the treatment greatly extended and enhanced the quality of their lives although they did not recover. According to Gorter, no other treatment offers similar results.

But he isn't one to rest on his laurels. For 35 years he has been working seven days a week, 14 hours a day, to develop new therapies and refine current treatment methods. His patients can call him any time. Whether he's in San Francisco, where he is a professor at the University of California, or one of the clinics he heads in Cape Town, Istanbul, Cologne or (shortly) Dubai and Shanghai—he is always on hand to help.

Gorter developed the cancer treatment using dendritic cells in co-operation with Professor Wolfgang Köstler of the University of Vienna in Austria and Professor Hinrich Peters of the University of Göttingen in Germany. These cells are vital to fighting cancer because they systematically scan all the body's cells searching for aberrations. Gorter explains, "When they discover an abnormal cell, they move at lightning speed to the nearest lymph node, where hundreds of thousands of 'killer' cells are stored like soldiers in a barracks. These cells go out on the attack if they are so instructed by the dendritic cells, like generals commanding an army."

One dendritic cell can simultaneously inform 5,000 “killer” cells of the characteristics of a cancer cell that must be destroyed. The dendritic cells, which look like little octopi, do this by spreading their tentacles. Gorter adds, “The ‘killer’ cells then swarm out and kill every cell with cancerous characteristics. As a result of this process, all the cancer cells that patients produce every day are dead within 24 to 36 hours.”

According to Gorter, cancer often takes root when dendritic cells are malfunctioning. “We’re all a bit cancerous” is his way of explaining that everyone has cancer cells in his or her body. “But things really start to go wrong when the body no longer recognizes or can kill these cells.”

That insight inspired Gorter and his colleagues to develop a method of producing large numbers of healthy, dendritic cells, which are reintroduced into the patient’s system. It works like this: “We take five tablespoons of blood and isolate the monocytes [undifferentiated or immature white blood cells produced in the bone marrow] that can be developed into dendritic cells. One week later we have 15 to 20 million extremely vital cells that are given back to the patient. These are well tolerated. Many people—even when their cancer has metastasized—do much better or recover completely. The therapy works on all types of tumours: both solid tumours—as is the case with colon, breast and lung cancer—as well as non-solid tumours such as lymphomas and leukemia.”

The treatment (which costs 2,600 euros or \$3,300 U.S.) is repeated six times with one-month breaks in between. This is why Gorter refers to it as a vaccine: “When the immune system has to learn something new, or change a particular function, the lesson must be repeated a number of times. The same thing is true with childhood illnesses. You have to repeat the vaccine several times. The patient often shows real signs of recovery after the third or fourth vaccination.”

And indeed, sometimes even after the first treatment, as was the case with Joe Pacini.

When Pacini arrived in Cologne via special transport, he was on his deathbed. Pancreatic cancer is one of the most aggressive and difficult types to treat. His Californian doctors had given up hope because 80 percent of his liver had been destroyed. Pacini underwent three days of getting vaccinations containing dendritic cells along with hyperthermia treatments (a method which artificially raises the patient’s body temperature). After that, he says, “I was even able to walk up to the third floor of my hotel without help. After the second day here I didn’t take any more pain medication because I was feeling so good.” Now, three months later, as Pacini returns to Cologne for his second treatment, he feels wonderful: “I feel so fit I’m walking three to four hours a day.” A smile lights up his face. “Yesterday I walked back and forth to Cologne’s cathedral.”

After the first series of treatments, Pacini’s oncologist in the United States measured his tumour markers—abnormal proteins made only by cancer cells that demonstrate the presence of cancer and its degree of aggressiveness. The doctor was surprised to see a sharp drop in the markers when he had expected a rise. Pacini notes, “My oncologist said: ‘I don’t know what they’re doing, but it’s working.’”

Despite promising results like this, research into treatments with dendritic cells is barely getting off the ground. “There’s not a lot of money to be earned from the research,” Gorter states. “You can’t get a patent on it because dendritic cells are autologous [drawn from and reintroduced to a patient’s own body]. Which is why pharmaceutical companies aren’t interested. Classic, random studies have never been done because this type of research is very expensive.” Gorter worries that his treatment, like other alternative methods, will not be approved by influential authorities like the U.S. Food and Drug Administration because these treatments run counter to the pharmaceutical-based philosophy of the medical establishment. He worries that legal charges may even be brought against doctors applying the therapy.

That’s the reason Gorter ended up working in Germany. The flamboyant professor feels more at home in a climate of professional freedom. All of his life he has lived by his own rules: “I used to wear jeans and shirts with flower prints. But when everyone started wearing them, it was time for a change.” In Germany he can wear his dicky bow ties and experiment with new therapies without any problem. Gorter: “In Germany, doctors enjoy a unique, constitutionally protected freedom to practise.” Recently, in fact, Germany’s High Court in Karlsruhe ruled unanimously that qualified physicians have complete freedom to treat seriously ill patients as they see fit and that insurers must pay for the prescribed treatments.

This therapeutic freedom means that German doctors are not limited to the standard cancer protocols imposed in other Western countries: operations, radiation or chemotherapy. New treatments can be used alongside conventional ones, and even some traditional healing methods are employed. Gorter, for instance, makes frequent use of hyperthermia or fever therapy, which has been used since ancient times. Hippocrates said: “Give me a fever and I’ll heal every illness.”

This therapy was rediscovered around 1880 by the American doctor William Coley. While researching the relationship between fever and tumour growth, Coley chanced to find a man who’d had several unsuccessful operations to remove tumours on his face and neck. His condition became further complicated by a serious skin infection that went hand in hand with a high fever. Yet the patient survived the high fever and, even more amazingly, discovered his tumours had disappeared.

Coley looked at the medical literature and discovered this was not an isolated case: As soon as patients developed a high fever, their tumours sometimes vanished. Coley started successfully experimenting with artificial fevers among cancer patients. He did this by giving them bacilli. Sometimes these bacilli even erupted into the worst inoperable tumours, only to disappear within hours.

“Fever therapy works amazingly well—alone and in combination with other therapies,” Gorter states. “When you combine chemotherapy with fever therapy you’ll have fewer side effects from the chemo.

“Cancer is a so-called ‘cold illness’ and often disappears when the body’s temperature rises,” he continues. “The immune system also works optimally when a fever strikes. The only down side of Coley’s therapy was that he couldn’t precisely determine the level of the fever. We can now, thanks to special beds in which patients are wrapped to their necks and the temperature is controlled using infrared lamps, rising to around 40 degrees Celsius [104 degrees Fahrenheit].”

When Gorter calls cancer a “cold” illness, he’s not simply referring to the temperature. “The characteristic of many modern illnesses is that they are cooling, debilitating, hardening and chronic. Until recently, nearly all epidemics—such as tuberculosis, malaria and the flu—were caused by parasites or bacteria. But particularly after World War II, bacteria slipped increasingly into the background. They’re still there, but nowadays no one dies of pneumonia. But what has taken its place are the debilitating, degenerative diseases that are mainly caused by viruses like hepatitis B and C. The distinguishing characteristics of these illnesses are hardening or sclerosis. When viruses are isolated, they take on the form of a crystal; it looks like fine table salt.”

Ninety-nine percent of all cancers also show hardening properties, according to Gorter. “If you’ve got a little lump in your breast but you can press into it—if it’s a little spongy—doctors say: ‘We’ll wait a month and see.’ But when a lump is hard and you regularly see calcification in the mammogram, there is cause for concern and usually a malignancy.”

Gorter says this hardening is not only seen in modern diseases like cancer, hardening of the arteries, multiple sclerosis and chronic fatigue syndrome, but also in our values, norms and language use. Gorter observes, “In our society, you’re not well paid for having a warm heart but for being smart. We have to be cool and efficient and above all we must not show too much warmth and enthusiasm. Those who do are quickly considered a little nuts or over the top. It’s a sign of our times.”

But these are the reasons why softness—or love—and warmth are particularly healing when it comes to cancer. Gorter nearly always asks his patients if there’s something that excites them; if they still have ideals. “I ask them: ‘Do you ever do anything for other people?’ Many look at me and say they’ve been busy working for decades and haven’t done anything all those years to help others.”

Gorter knows from experience the healing power of enthusiasm, love and optimism. When, at the age of 26, he was diagnosed with an aggressive form of cancer that had spread to his stomach and lungs, he decided to heal himself. He took very hot baths—something he doesn’t necessarily advise for older patients as the heat can cause strong heart palpitations and low blood pressure as well as severe dizziness. He also started to live life with even more joy and optimism. Now he says he has learned this: “If something makes you enthusiastic you have a reason to live. Ultimately that is the way to break the vicious circle of hardening and cooling.”

Robert Gorter can be reached via Medical Center Cologne, Hohenstaufenring 30-32, 50674 Keulen, Germany, phone (PLEASE NOTE: DIFFERENT FROM PAPER VERSION OF ODE MAGAZINE) +49 (0)221 7886301.

Email: r.gorter@cologne-model.com.

www.cologne-model.com and www.anthroposophical-medicine.info