

THE CANCER REVOLUTION

Additional Material for Appendix 1

Dr Douwes

More about treatment at Klinik St Georg

Pretreatment protocol

In addition to cancer-destructive methods, which include hyperthermia in combination with IPT, we give our patients obligatory intravenous infusions (IVs), composed of several nutritional supplements. We administer these prior to chemotherapy, hyperthermia & IPT. These substances make the treatment modalities more effective by increasing the sensitivity of cancer tissue to our treatment. This combination prevents the cancer from repairing itself after it has been damaged by hyperthermia and chemotherapy. With hyperthermia and IPT we can overcome the multi drug resistance (MDR) that most cancers have, especially if they have been previously treated with several chemotherapy regimens. Although our complementary treatment is clearly intended to have its greatest effects at the cancer site, it has the additional benefits of boosting the immune system and detoxification at the same time.

One of the substances that we use in the pre-cancer nutritional IV is high-dose vitamin C. We give patients this vitamin in a high dose to use it as pro-oxidant (see 'Other tests and treatments to heal and support' below). We also give amino acid both orally and intravenously before patients commence treatments; we include amino acids in the IV, bicarbonate, procaine as well as bioactive substances. Furthermore, we give artemisinin, resveratrol, quercetin, curcumin and a green tea extract known as EGCG. Each one of



Out patient infusion room. We have six chairs. The room is operated by 3 RNs and a physician.

these substances has a different effect upon the cancer and the patients' symptoms. For instance, glutamine boosts neutrophil, macrophage and other immune cell counts and is a source of food for them. Glutamine has additional anti-cancer properties, and protects the GI tract against the side effects of chemotherapy.

In oncology we very often struggle to overcome the MDR-1 (multi-drug resistance-1) gene in cancer. This gene stands for a pump in the cancer cell called the Pgp pump, which removes chemotherapy drugs from the cancer cells. Hyperthermia and IPT can inhibit this pump, but also nutrition can influence it.

Tailoring treatments to the individual patient

Whether or not we recommend IPT in combination with hyperthermia depends upon the patients we are treating and the type of cancer that they have. For instance, for lymphomas, leukemias and testicular cancers we always choose the conventional way but combine it with hyperthermia. For an older woman with ovarian cancer, which isn't a metabolically active cancer, we would recommend IPT treatments once weekly, or even less frequently, combined with hyperthermia every second day. This cancer does not replicate as quickly because it is not very metabolically active.

As another example, in a patient who came with a heavy pretreatment and therefore subsequently in bad shape metabolically, mostly very catabolic with weight loss, anaemia or even cachexia, we would not do chemotherapy in the first place, but would start with a programme of intensive support with nutrition, vitamins, minerals and bioactive substances. Even more important is detoxification and oxygen support - for instance with ionised oxygen or ozone.

In determining whether hyperthermia, in combination with our other treatment protocols, has been successful, we check our patients regularly with ultrasound and do PET/CT scans or MRIs after six to twelve weeks of treatment. We also measure tumour markers and observe their trend, which helps us to judge the treatment response.

Conventional chemotherapy versus IPT

When patients' cancers respond well to conventional therapy, as in cases of leukaemia, lymphoma, or testicular cancer, we prefer the conventional approach in combination with local or systemic hyperthermia, to optimise treatment effect. We also support them with orthomolecular medicine, which helps them to go through their conventional treatments and reduces the side effects of those treatments. We can do IPT for these cancers too, but it is often not necessary.

IPT is effective in most types of cancer, although we apply it only in cases where patients request it, because insurances do not cover this therapy. Sometimes, insurance companies are very strict and tell their clients not to take IPT, because they would only pay for conventional chemotherapy and, of course, for all the side effects thereof. We regularly observe that patients respond well to IPT, especially when combined with hyperthermia, with fewer side effects than if they had done the conventional full-dose chemotherapy. Some patients that stopped conventional care due to side effects had no problems with IPT and achieved the full positive treatment effect we had expected. We always observe that, compared with conventional treatments, patients using our integrative cancer therapy concept (ICTC) have less deterioration in their life quality. Our patients are, generally, very well educated and don't want conventional treatment alone. They prefer a combination such as we provide in our integrative cancer therapy concept, i.e. nutrition, orthomolecular medicine, detoxification, hyperthermia, ECT, PDT and psychotherapy. Many of our patients have previously had conventional therapy, but either the side effects were intolerable or they didn't respond to treatment. Subsequently, they

want make their own decisions regarding treatment (rather than allowing someone else - and especially not insurance companies - to dictate what they should do or not do). Usually, we don't have to discuss whether our integrative cancer therapy concept (which includes conventional and complementary therapies) or conventional medicine alone is best for them. They come here because they want to be here. People look for us; we don't look for them. They come to us because they don't want conventional treatment alone, they are looking for more.

We have no animosity towards mainstream medicine, but we prefer to do it more effectively, in a manner that is better tolerated and offers improved quality of life and prognosis. One day, our conception may become the mainstream type of treatment as more and more people become aware of its benefits.

Treating hormone imbalances

It's important for us to treat our patients' hormone imbalances, especially if they have hormonally driven cancers such as breast, prostate, ovarian, and uterine. To determine hormonal status, we take tests that provide us with the actual hormone levels; these help us determine how to treat them. If women have hormonally driven cancers, it's important that we get their estradiol (as well as some of their other hormones) into a less proliferative state. Estradiol is one of three types of oestrogen that the body produces which contributes to cancer growth. Estriol, or E-3, is a less proliferative hormone than estradiol E-2. E-2 is a great hormone for females to have as girls who are becoming women, but women in their 50s and 60s need more estriol, rather than estradiol.

Unfortunately, we live in a society where we are exposed to chemicals and toxins such as polystyrene, which are mimicking and creating more estradiol in our bodies. We call such substance xenoestrogens. As a result, men are becoming more feminine, gaining weight, developing insulin resistance, and getting bigger breasts. These chemicals stored in the fat tissue are oestrogen-aggravating, which perpetuates the problem. Women face similar problems as a result of excess oestrogen. Also, oestrogens interfere with thyroid function, so that it becomes disturbed. Most women with breast cancer also have a thyroid dysfunction and need special support. Then liver can have difficulty metabolising all the oestrogen, resulting in oestrogen dominance in the body. This, then, worsens insulin resistance and creates a lot of other unnecessary problems such as the metabolism of estradiol to 16 OH-estradiol, which may be carcinogenic.

Excess oestrogen not only has an effect upon cancer, but also upon the immune and nervous systems. We therefore treat imbalances in each one of these systems so that they work together better, as a whole.

The body's hormonal system is based primarily on the thyroid, adrenal gland, and sex hormones. It's important to make sure that all of these hormones are functioning properly, because they affect not only cancer growth, but also patients' overall health. We have many patients who have low thyroid and adrenal function, and their sex hormones are also low. So what they need is a hormonal balance. In this context we just replace the missing hormones and also try to balance it by giving liquid glandular formulas. We use one that contains proteins and peptides, as well as other growth factors, and signaling molecules and mesenchyme tissue from the umbilical cord of sheep (the latter is a type of loose, connective embryonic tissue). We further use several other agents for adrenal and thyroid support.

Treating immune system imbalances and infections

We don't just do tests to determine the status of our patients' cancers and hormones; we also look for any other problems that might be impacting their health. Through additional testing, we often find that we need to detoxify them and clean up their immune systems. For instance, in the beginning of our treatment, we measure inflammatory mediators, such as CRP, Procalcitonin, α -TNF, IL-6, NF κ B to determine what is causing the inflammation in their bodies and how severe it is. We check the status of their immune system to see, for example, what the T-cells and natural killer (NK) cells are doing. For this we utilise a special function test. With this information we can actively balance the immune system and make it work against the cancer. When patients have chronic infections that weaken their immune systems it impairs their ability to fight cancer.

The immune system is composed of a variety of different cells that all have specific duties, for instance the T-Helper cells are divided into three different subtypes Th-1, Th-2 and T-regs (so called regulating cells) and the ratios of these should be balanced. That is not always easy, but possible.

In addition, to support the immune system with xenogenic peptide, thymus factor, nutrients, etc. we look for other chronic diseases our patients may have in addition to the cancer, for instance Lyme disease and other infections. In cases where necessary we will treat these also. Lyme disease especially is very sensitive to heat treatment and will disappear mostly after one or two whole body hyperthermia treatments in combination with IPT (with antibiotics). By using whole body hyperthermia with IPT in cancer patients with infections, we are thus able to kill two birds with one stone.

The brain, like the immune system, has its own balancing mechanisms, which can be categorised as excitatory/inhibitory. The inhibitory mechanisms put the body to sleep, while the excitatory mechanisms keep it functioning during the day. It is not good to have too many excitatory mechanisms without inhibitory ones and vice versa because otherwise people get ill. Our patients often have not enough inhibitory-supporting neurotransmitters such as Serotonin, so their mood is down, nor do they have enough excitatory neurotransmitters, so they have no energy. With a Neurostress test, we can obtain information on our patients' brain chemistry, and then determine which treatment is indicated to correct their neurotransmitter deficiencies. We can treat the body's Serotonin levels, with a combination of 5-hydroxy tryptophan (5-HPT), SAMe, zinc, B6, and other vitamins; this helps the patients to maintain a positive mood and good quality of sleep. Serotonin also helps to activate the rest of the brain; it's the gateway to the entire functioning of the brain and its chemistry. Balancing the hormones and immune system also has a positive effect upon brain chemistry.

Other tests and treatments to heal and support

We also give high dose vitamin C and K-3 IVs, and do detoxification therapy. Vitamin C appears to a cancer cell as a sugar molecule and is quickly taken up by the cancer. Once the vitamin C connects with an iron molecule in the cell, peroxide is released, which injures the cells internally. Because cancer cells have low activity of catalase and superoxide dismutase they have a difficult time repairing from such damage. Vitamin K-3 augments the effects of vitamin C and helps to inhibit cancer growth.

Finally, many of our patients have low vitamin D levels, so we often prescribe 10,000-15,000 units of vitamin D per day, along with choleretics and pancreatic enzymes to help digest fat, if they have trouble digesting these fats (since vitamin D is fat-soluble). Some patients have a poor antioxidant status, as a result of not being able to digest fats



Laboratory for monitoring our patients

and proteins (and hence their nutrients), so we add enzymes to their regimens which aid in protein and fat digestion. We also give them antioxidant support in the form of supplements. We find it important to restore all the body's functions during the specific cancer treatment. This restoration usually cannot be accomplished in a short period of time. Thus, we inform and teach our patients that the treatments have to be followed for an extended period of time, perhaps many months.



Green Tea

In summary, we look at different parameters in our patients, and try to improve them. The healthier the patient as host of the cancer is, the more difficult is it for the cancer to grow. With our integrative cancer therapy concept we not only attack the cancer, but we support the host.