THE NEW DIRECTION IN CANCER THERAPY

To avoid death from cancer, we need to prevent inflammation by stabilising and then only gradually eliminating tumours with a combination of oral alkalising, antimicrobial treatments, proteolytic enzymes and periods of raw-food fasting.

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Website: http://www.health-sciencespirit.com he present emphasis in cancer therapy is to destroy tumours, and all research focuses on finding new ways for doing this. However, there is little factual evidence that this approach actually works and benefits patients, while there is mounting evidence that it is exactly this approach that makes cancer so dangerous. In my more than 30 years of working with cancer patients, I started out with this common perception of seeing tumours as the enemy that should be destroyed, but gradually, based on experience and new independent research, I changed my views.

I now regard cancer cells and tumours as generally harmless, and the common therapies as the main cause of cancer deaths. I believe that with the right strategy, no one needs to die of cancer. Here I want to give a short overview of a proposed change in cancer therapy.

For more than 100 years, there has been increasing evidence for a microbial cause of cancer. I have written about this in my article "Pleomorphic Microbes: The Hidden Cause of Cancer and Autoimmune Diseases". My present understanding of the development of cancer is as follows.

Cancer may start with a primary infection which becomes chronic in a stressed or congested part of the body, or, according to Reich², microbial activity may arise spontaneously from the disintegration of unhealthy tissue. The body limits the infestation by encapsulating it; alternatively, we may regard tumour formation as a biofilm which microbes use to protect themselves from the immune system. This is similar to trees forming bark tumours when stung by certain wasps. As long as the blood is reasonably clean, a tumour is just a tumour—not malignant and not a cancer.

However, if the immune system is under constant attack, as from intestinal dysbiosis, *Candida*, toxins invading the blood due to leaky gut syndrome, stressful events such as emotional trauma or subconscious fear and shock due to a cancer diagnosis, then the blood becomes infested with dangerous (pleomorphic) microbes. Now, also, any more or less dormant microbes inside the tumour become active. Cancer-causing microbes produce metabolites that block the oxidative energy production of affected cells. Seeger and Budwig showed that there is a blockage of the cytochrome system. In addition, there may be a blockage of the citric acid cycle by fungal tartaric acid³ which competes with malic acid. Cancer microbes also produce growth hormones which cause the tumour to expand.

In any case, pleomorphic microbes increasingly block the oxidative energy production of affected cells and they start producing energy anaerobically, similar to fungi. Also, tumour cells begin to look like fungal cells. Now the tumour is malignant but still contained. This situation may persist for years with the tumour slowly growing, shrinking or becoming dormant for long periods depending on the vitality of the body, the strength of the immune system and especially the acid—alkali balance or pH of the lymphatic system. The more that the oxidative energy production of tumours is blocked, the

more lactic acid is produced, the more malignant they are and the faster they grow and metastasise. However, and this is of vital importance, tumours cannot grow in an alkaline environment.

Cancer cells look, behave, metabolise and spread just like fungi. We can see this in comparison to *Candida*. Normally it is just a harmless and possibly even beneficial intestinal yeast, but when its existence is threatened it transforms into a dangerous and invasive fungal form. It is the same with cancer cells. When tumours come under increasing pressure from a worsening microbial presence or from aggressive medical treatment, they become locally invasive and also tend to form distant metastases.

The trend in modern medicine is to remove even very small tumours. This causes already-present dormant micrometastases to spring into life years earlier than

they would otherwise have done, leading to an earlier death⁴, especially in younger individuals with strong inflammatory reactions.

Whether conventional tumour treatment leads to metastasis does not depend on the size of the tumour or its conventionally assigned stage or malignancy, but rather on the microbial condition of the blood and especially the lymphatic pH (acidity). If conventional

treatment is successful in the long term, this means that the tumour was harmless anyway in regard to microbial presence.

However, even metastases do not normally kill. Tumours only rarely kill directly by pressing on vital structures; instead, they kill more commonly indirectly if they are attacked by a tumour-destroying treatment or by an improved immune system and release large amounts This then causes death due to massive of toxins. inflammations and infections, often resulting in death from lung infections or heart or liver failure. It does not matter if conventional or natural therapies have been used to cause these inflammations. Most cancer patients with metastases who survive the initial treatments die years later from cachexia—severe weightloss and muscle wasting due to progressive anaemia from the destruction of erythrocytes (red blood cells) by fungal-type blood microbes.

From this we see that there are three possible ways of dying from cancer:

- A tumour becomes too large and obstructs vital organ functions, although this is rare;
- Immune attacks and toxins released by a disintegrating tumour cause massive inflammations;
- Most erythrocytes are disabled by blood microbes and are unable to supply oxygen.

Preventing Cancer Deaths

If we can prevent these three events, then there will be no deaths from cancer. A recent study shows the general principle of how this can be done, even in a conventional setting with chemotherapy. This is based on the idea of not destroying the tumour, but just giving it enough chemotherapy to keep it from growing any further. The researcher, Robert A. Gatenby, MD, stated in an interview: "With a mouse ovarian cancer model, if you treat it with a very high dose, the tumor goes away. It looks like you've cured it. But a couple weeks later it comes back and starts killing animals. This is a standard outcome. What we did is use smaller doses of drugs and applied them when necessary. We were able to keep tumors stable and mice alive indefinitely." 5

Instead of using chemotherapy, alkalising is the method of choice in natural medicine to stabilise a

tumour and keep it from growing any further. For a tumour to spread, it needs to dissolve the surrounding connective tissue, but that can happen only if the tissue is sufficiently acidic to activate the proteolytic enzymes of the tumour.

A 2009 study showed that oral sodium bicarbonate not only inhibits the growth of tumours and the formation of spontaneous metastases in

mouse models of metastatic breast cancer, but also reduces the rate of lymph node involvement and hepatic metastases.⁶

These findings were confirmed and surpassed in a January 2013 study which showed in detail how oral bicarbonate not only stops tumour growth but can also shrink tumours. Bicarbonate alkalises the lymph fluid and inhibits inflammation so that a gradually shrinking tumour does not cause a problem as long as alkalinity is maintained.⁷

This study provides fascinating details about tumour growth as a function of acidity. Measurements inside malignant tumours showed an acidic pH of 6.5–6.9, compared to normal tissue with a pH of 7.2–7.4 (pH 7 is neutral). A tumour expanded into the surrounding tissue only where the pH at the edge of the tumour was lower than 7.2. When one side of the tumour had a pH of 6.7 and the other side 7.3, then the tumour would shrink at the side of the higher pH and expand into the tissue at the side with the lower pH. Within a few days, tumours were actually visibly moving around according to the acid–alkali balance of their environment.

In the study's untreated mice, the whole tumour and its surrounding tissue were acidic, with the lowest pH (6.57) at the edge of the tumour. In the treated mice, the whole tumour and its surrounding tissue were alkaline,

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with the highest pH (7.26) at the edge of the tumour. Untreated tumours on average doubled in size between days two and 16 after transplanting. However, those treated with sodium bicarbonate grew slowly up to day eight and then started shrinking to about half that size. but one of four tumours had already completely dissolved by day twelve. The amount of sodium bicarbonate used was 17 grams per litre of water, and the mice could drink as much as they liked

Recently I had a demonstration of how different treatment options tend to play out. In October 2012, a woman with whom I was corresponding was diagnosed with stage 4 lung cancer (the last stage before dving). She had a large tumour in her right lung, and a lot of fluid in her heart and lungs. At the same time, the famous cricket

commentator and former cricketer. Tony Greig, was diagnosed with stage 1 lung cancer, having a small malignant lesion in his right lung. He had surgery and other conventional treatment. By the end of December, Tony Greig had died of cardiac arrest, while the woman was using alkalising and antimicrobial therapy had no more fluid, her heart was in excellent condition, her blood tests were extremely healthy and she felt great. The tumour was still the same size as when it was scanned in November.

Shrinking Tumours Safely

An interesting presentation by Gershom Zajicek, MD (Professor of Experimental Medicine and Cancer Research at The Hebrew University of Jerusalem), titled "Treatment accelerates tumor growth", explained recent research showing the futility and danger of trying to remove or reduce tumours with conventional therapies because, afterwards, either metastases develop or tumours regrow at an increased rate.8

Chemotherapy, especially, was found to make tumours metastasise and grow massively in size afterwards. As a result, the drugs killed the patients more quickly.9 When tumours are stressed, they produce stem cells and, from these, new cancer cells which are much more malignant and resistant to therapy than they were pre-treatment. Conventional medicine disguises these facts with statistics, by detecting and removing increasingly smaller and harmless tumours which would never have posed a threat but counting them as cured cancers. Furthermore, deaths after cancer treatment are often assigned to other causes, and this reduces the statistical cancer death rate.

Unfortunately, many natural therapies create problems

as well. This is basically the case with all therapies that destroy tumours and generate powerful inflammations in the process. Examples of this are the Gerson therapy or the use of black salve or similar remedies in destroying breast tumours. These can be successful but often they are not, and younger and healthier individuals have the most problems because their immune systems produce the strongest inflammations.

Even destroying tumours by infusion of sodium bicarbonate, as with the Simoncini method, is dangerous and can cause inflammation and death. Such problems with natural methods could easily be avoided by using, in addition, anti-inflammatory measures such as maintaining oral alkalising, antimicrobial therapy and/or periods of undereating or fasting.

> Now, even conventional research shows that fasting blocks tumour growth¹⁰ and that periodic fasting¹¹ is much more effective than unrestricted food intake or permanent restriction. The advantage of fasting is that it shrinks tumours without causing inflammation, because when the body lacks food it just uses unhealthy tissue and tumours as an energy source. An added benefit is that the food restriction also suppresses microbial activity. Some famous cancer cures such as the Breuss Cure and the Grape

> > Another way of shrinking and possibly eliminating tumours without creating inflammations is by strongly alkalising, as with caesium chloride or with very high amounts of sodium bicarbonate to keep the urine above pH 8 for some time. But these therapies can also cause problems, and in most cases I see no need to go to extremes.

> > Frequently used in natural medicine are proteolytic enzymes.

as they help to remove protein debris and shrink tumours while at the same time inhibiting inflammations. Favourites are bromelain and papain. In addition, the fibrinolytic enzymes nattokinase and serrapeptase inhibit excessive blood clumping or hypercoagulation¹² which is needed for metastases to form.

I believe that the most convenient and reliable method is to keep tumours initially stable with alkalisers, 13 e.g., using sodium bicarbonate and potassium citrate spread out during the day, and subsequently shrink tumours gradually without causing inflammation. This can be done with a combination of alkalising, antimicrobial therapy, proteolytic enzymes and periodic raw-food fasting.

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A remaining problem is still the treatment of individuals who used conventional treatment and are now dying from cachexia. Videos (for example, Humoral Pathology and Symbiosis or Parasitism) made with Grayfield microscopy¹⁴ show very clearly that, with late-stage cancer, most of the erythrocytes are heavily infested with microbes and are unable to function. This obviously calls for antimicrobial therapy combined with oxygen therapy. Also, individuals with AIDS, tuberculosis and various autoimmune diseases frequently die of cachexia, which again shows that this condition is not caused by tumours but, rather, by microbes.

Growth Promoters and Inhibitors

To keep a tumour stable, it is also important to minimise growthpromoters. The main growth-promoter is inflammation, which can be controlled with antimicrobial therapy, alkalising. fasting. proteolytic enzymes, antioxidants and antiinflammatory herbs. Other common growth-promoters are polyunsaturated oils, phosphates or foods high in phosphorus, and sugar, cereals and grain products, especially more highly refined varieties, because all of these increase inflammation.

Easily digestible carbohydrates are so harmful with cancer because they are the main food for cancer cells and microbes. More glucose means more lactic acid and higher acidity, which in turn means more inflammation and stronger tumour growth.

Another common growthpromoter is insulin-like growth factor 1, or IGF-1, in cow's milk. While it can stimulate the growth of all tumours, it especially

affects those of the breasts, prostate, lungs and colon. It may be no coincidence that these are also the most frequent cancers. A universal tumour growth-promoter is chronic stress of any kind, be it emotional, nutritional or environmental.

Fresh vegetables and their juices, and especially greenleaf vegetables, beetroot and wheatgrass, have been shown to be able to improve the oxygen metabolism of cancer cells and therefore make them less malignant and possibly normal.

More recently, this has also been shown for MSM (dimethyl sulfone). MSM is interesting in that it gives a hint of what makes cells malignant. Melanoma cells of a particularly aggressive strain were treated with a 2% MSM solution. After one day of exposure, the cells had become completely normal and remained so indefinitely.

However, DMSO (dimethyl sulfoxide) did not normalise these cells.¹⁵ The only difference between MSM and DMSO is an additional oxygen atom in MSM. I interpret this to mean that MSM had been enzymatically reduced to DMSO, and the liberated oxygen was in a form that repaired the oxidative energy metabolism of the melanoma cells. This is basically proof that cancer cells and normal cells can easily be converted into each other by either blocking or restoring the oxidative energy metabolism.

Commonly, cancer microbes prevent cancer cells from becoming normal, but in this case DMSO produced by the reduction of MSM would have inhibited or killed

such microbes. DMSO is effective against fungi and mycoplasmas. Both effects, mitochondrial repair and microbial inhibition, would have combined to normalise these melanoma cells. However, in actual therapy, this may not work so well unless blood microbes are also under control.

DMSO is frequently used as a carrier in conventional chemotherapy or in antiviral therapy because of its ability to enter affected cells easily. With cancer, it specifically zooms in on malignant cells and can be used to

carry remedies along. This is especially good for treating brain tumours which are otherwise difficult to reach. There are also reports of an anticancer effect of DMSO on its own. It is apparently beneficial with many cancers such as breast, lung and prostate cancers and lymphomas, and it also can normalise leukaemia cells. In one recent study with highly invasive lung cancer cells, the authors wrote: "We found that

DMSO can significantly inhibit cancer cell invasion, migration, proliferation, and colony formation capabilities..."¹⁶ DMSO also caused cancer cells to die naturally, and it has been shown to protect against radiation damage, especially in regard to cancer treatment.

Therefore, it may be preferable to combine MSM with DMSO in cancer treatment. MSM may be dissolved in DMSO at a rate of up to 34 grams per 100 millilitres. For breast cancer, melanomas and other tumours close to the skin, this solution may be diluted 2:1 or 1:1 with water and kept as a pack over the tumour site until the tumour appears to normalise. For accessible internal tumours, such as in the stomach, pancreas, uterus, etc., it may be best to expose them frequently to this solution by assuming a position which tends to pool the ingested

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or instilled solution around the tumour. For inaccessible tumours, a combination of high-dose topical and oral intake could be tried. However, DMSO should not be used rectally as it may carry toxins into the blood.

Remaining Questions

A main problem with antimicrobial therapy is the

uncertainty of deciding which remedies are best to clean the blood, in which dosages and combinations, and for how long to use them. This could easily be assessed with live blood analysis (LBA), but natural therapists who use LBA commonly do not see a sufficient number of cancer patients to be able to make meaningful comparisons. Furthermore, the most effective remedies against pleomorphic

microbes are banned or under attack from health authorities in most western countries, and it may be risky to research in this area. Alternative-minded medical doctors may have some more leeway in this regard. Perhaps a common databank could be established.

Also other aspects would need to be investigated, such as the influence of intestinal dysbiosis, leaky gut

syndrome and root-canal fillings on blood microbes, and how best to normalise conditions. There is evidence that cleaning the blood will also gradually eliminate tumours or keep them dormant. This, too, needs to be confirmed or researched further to find the causes of any failures.

Until we have a reliable protocol, I recommend using a variety of broad-spectrum antimicrobials with good

antifungal properties in different combinations and dosages, as Ultimate detailed in The Cleanse¹⁷, and with the addition of an electronic blood purifier or suitable frequency device and. of course, alkalising to keep urine above pH 7. In Germany, isopathic remedies for the Enderlein therapy are readily available. For a detailed program. see my book Overcoming Cancer.18

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Endnotes

- 1. Last, Walter, "Pleomorphic Microbes: The Hidden Cause of Cancer and Autoimmune Diseases", http://tinyurl.com/a8ps9qt
- 2. Cantwell, Alan, Jr, "Dr Wilhelm Reich: Scientific Genius – or Medical Madman?, New Dawn, 9 June 2004, http://tinvurl.com/4ilx2su
- **3.** Shaw, William, Dr, "The Yeast Problem & Bacteria Byproducts", The Great Plains Laboratory, Inc., http://tinyurl.com/82z79t3
- **4.** Last, Walter, "Proof that Cancer Surgery Increases Mortality", http://tinyurl.com/3ob6o3o
- **5.** Keim, Brandon, "To Survive Cancer, Live With It" (interview with Robert A. Gatenby, MD), Wired.com, 27 May 2009,
- http://tinyurl.com/pmtel5; also see Robert A. Gatenby, "A change of strategy in the war on cancer", *Nature* 2009 May 27; 459(7246)
- **6.** Robey, Ian F. et al., "Bicarbonate Increases Tumor pH and Inhibits Spontaneous Metastases", *Cancer*

Research 2009 Mar 15; 69(6), http://tinyurl.com/mvb7up

- **7.** Estrella, Veronica, Tingan Chen, Mark Lloyd et al., "Acidity generated by the tumor microenvironment drives local invasion", *Cancer Research*, pub. online 3 January 2013, http://tinyurl.com/anuen9q
- **8.** Zajicek, Gershom, MD, "Treatment accelerates tumor growth", 9 November 2012, http://tinyurl.com/ah238o7
- **9.** Gucciardi, Anthony, "Woops! Study Accidentally Finds Chemotherapy Makes Cancer Far Worse", Natural Society, 7 August 2012 (updated 18 November 2012), http://tinyurl.com/avdu3tj
- 10. Food for Breast Cancer, "Fasting protects normal cells and sensitizes cancer cells to chemotherapy: American Association for Cancer Research (AACR) Meeting, April 2010", posted 6 May 2010, http://tinyurl.com/2d954k9
- 11. McKeever, Kevin, "Periodic Dieting May Cut Breast Cancer Risk", MedicineNet.com, 4 August 2009,

http://tinvurl.com/a3sfhuw

- **12.** Last, Walter, "Hypercoagulation", http://tinyurl.com/b995onm
- **13.** Last, Walter, "Alkalizing with Sodium Bicarbonate and Potassium Citrate", http://tinyurl.com/acu4cle
- **14.** Grayfield Optical Inc, Online Videos, http://tinyurl.com/d9c4n55
- 15. Caron, Joan McIntyre et al., "Methyl Sulfone Induces Loss of Metastatic Properties and Reemergence of Normal Phenotypes in a Metastatic Cloudman S-91 (M3) Murine Melanoma Cell Line", PLoS ONE 2010; 5(8):e11788, http://tinyurl.com/aqxlwc2
- **16.** Wang, Chi-Chung et al., "Dimethyl Sulfoxide Promotes the Multiple Functions of the Tumor Suppressor HLJ1 through Activator Protein-1 Activation in NSCLC Cells", PLoS ONE 2012; 7(4):e33772, http://tinyurl.com/czwatek
- 17. Last, Walter, "The Ultimate Cleanse", http://tinyurl.com/4cxzpu7
- **18.** Last, Walter, Overcoming Cancer: A Guide to Self-Healing, 2012, 6th rev. edition, http://tinyurl.com/3o3xrfn