NEW BEGINNINGS
CISS
Newsletter of The Cancer Information & Support Society
Vol 40 No 3
May/June 2020
... let us be the light at the beginning of your journey

Raising the bar for surgery

Ian Harris

We all understand the role of clinical trials in testing new medicines but many people would be surprised to find out that there are different regulatory processes in place for the introduction of new medical devices and surgical techniques and procedures.

This can mean that the evidence-base for these components of health care is less than those for medicines and therefore there is potential for them to cause unnecessary harm.

Below Professor Ian Harris, Professor of Orthopaedic Surgery at UNSW, discusses the problems with the current regulatory environment and suggests changes to improve the safety and quality use of devices and surgery.

This article is published as part of the TOO MUCH of a Good Thing series, which is investigating how to reduce overdiagnosis and overtreatment in Australia and globally, and is published as a collaboration between Wiser Healthcare and Croakey.

To follow the series, bookmark this link, and follow #WiserHealthcare on Twitter.

Ian Harris writes:

Most people have some idea of the rigorous testing that is required for any drug to be accepted for clinical use and government reimbursement: The drug must be compared to other drugs or a placebo in a rigorous scientific trial in terms of potential benefits and harms – usually a randomised trial and often with patients 'blinded' to what treatment they are receiving.

And only when these tests have been reviewed in detail by expert panels will they be approved for any kind of government reimbursement. It's a high bar and it needs to be, otherwise public money may be wasted and/or people may be unnecessarily harmed.

Professor Ian Harris

Regulation of medical devices

How high is the 'bar' for surgery to clear before acceptance? Well, it depends. For a start, there are two different pathways: one for devices (things that are implanted in the body, like joint replacements, stents and heart valves) and one for procedures. Implantable devices are not required to have high quality (randomised trial) evidence comparing them to previously approved devices or placebo. In fact, they just need to show that they are "similar" (structurally) to existing (already approved) devices and that they are safe.

This 'low bar' for devices has led to problems like the worldwide recall of some hip replacement devices after being used in thousands of people. The mechanical properties and structural design of these hip replacement devices were very similar to already-approved devices and they passed the approval process based on that similarity. Unfortunately, however, the subtle differences in design in these new hip replacement devices were enough to cause catastrophic failure in a large number of cases – something that would have been easily detected if clinical evidence of actual effectiveness in real people had been required, like it is for drugs.

Some years ago, partly in response to such cases as described above, the government made "clinical evidence" for new devices a requirement for acceptance for clinical use, yet the type or standard of clinical evidence has never been made clear. Simply showing that the device has been implanted in some people without terrible early failures seems to be enough – nothing about comparative studies where the device is tested against a successful device.

Regulation of techniques and procedures

Separate to devices is the 'bar' that techniques and procedures are required to clear. Here, there is almost no bar if the procedure falls within an existing description. As an example, orthopaedic surgeons recently started doing hip replacements using a new technique: the anterior approach, which involves literally coming at ("approaching") the hip from the front rather than the back or the side.

There was a bit of a learning curve involved, as there were more complications associated with using this new technique (for example, the thigh bone would break more often when trying to insert the hip). Eventually, things worked out and this new technique is commonly used and probably not any worse than other techniques. For a while however, it looked like a potential disaster, with no regulatory or ethical oversight involved, just individual surgeons trying a new technique.

In fact, the regulatory environment that does exist around new techniques is not only inadequate, it is actually counter-

(continued on page 4)

CANCER INFORMATION & SUPPORT SOCIETY NEWSLETTER

Vol. 40 No. 3 May/June 2020

Editor: Don Benjamin

CISS Website: www.ciss.org.au

Office hours: Monday - Friday 9.00am - 1.00 & 1.30pm - 5.00pm

The Secretary
Cancer Information & Support Society
6/56 Chandos St
St Leonards NSW 2065
Phone/Fax: (02) 9906 2189
email: support@ciss.org.au

IN THIS ISSUE

Don't mention the Warburg: finding cancer's sweet spot by Bryan Hubbard

The discoveries of Otto Warburg are finally being recognized, with new research adding to his theories of glucose and cancer.

What's going on in the body when we have cancer? The standard definition is that healthy cells mutate and grow rapidly. As the abnormal cells cluster, they form a tumor, which can spread to other parts of the body - and this gets treated with chemotherapy, radiotherapy or surgery.

It's a description that leaves a lot unanswered. Why, for instance, do cells mutate in the first place? And how can cancer cells grow far more quickly than healthy cells? The questions aren't trivial; if we could answer them, we would know how to prevent cancer and treat it without destroying the immune system in the process.

Several new theories have emerged that could answer these questions - and both see sugar as playing a key role in the cause and development of cancer. They build on discoveries made by German biochemist Otto Warburg in the 1920s. Despite being awarded the Nobel Prize for his research, these breakthroughs have been largely ignored since then, and the "Warburg effect" reduced to a footnote in cancer research.

Oncologists have long recognized glucose as a marker for cancer, and they use positron emission tomography (PET) scans to identify areas in the body that consume excessive amounts of it. The more glucose being consumed, the more pessimistic the prognosis.

But while conventional cancer therapy recognizes high glucose consumption is a sign of cancer, it has never accepted Warburg's belief that it is integral to the process of cancer. However, that has been slowly changing with new research focusing on cancer's biochemistry and the source of its energy.

The insulin connection

One of the researchers at the vanguard of the Warburg revival is Dr Lewis Cantley from the Meyer Cancer Center at Weill Cornell Medical School in New York. He's become convinced that most cancers are caused by an excess of sugar, or, more precisely, insulin - a hormone the body releases to break down sugars from carbohydrates in our diet.

Forty years ago, Dr Cantley identified an enzyme, called PI3K (phosphoinositide-3 -kinase), that he described as a master switch for cancer. It plays a key role in the body's interplay between insulin and glucose (also known as blood sugar). If the process slows, the body becomes insulin resistant, and cells cannot absorb

(continued on page 7)

Free Psych-K & Emotion Code for CISS members

CISS members can receive Psych-K and Emotion Code to identify and change negative belief systems—free of charge. Ring the Office to try it.

Supplements for CISS Members

Low Dose Naltrexone all strengths 1.5mg to 4.5mg
100 compounded capsules (Doctor's prescription needed)
Look up "Low Dose Naltrexone" Homepage
Stabilised electrolytes of oxygen 50ml—$15 (Chlorine Dioxide)
Visionary Health Compounding Chemist (02) 4969 5081

New Members:

March/April: Susan O'Neil, Anja Spets
May/June: Chrisanya Ashcroft

Donations to CISS:

March/April: L.M $250

DVDs for Sale from the CISS Office

CISS Seminar "Cancer & Hope - Survivors share their Lessons" are available for $29.50 plus postage for members or $39.50 + postage for non-members

The Cancer Information & Support Society is an educational, non- profit organisation. The information in this newsletter is made available as a community service. It is not meant to be construed as, or in place of, medical advice or treatment by your physician. CISS does not diagnose, treat or prescribe for any human disease or physical condition. It does not prescribe or dispense medicine of any kind. CISS is not commercially affiliated with any product, therapy, company, publication or person and it assumes no responsibility for the use of be information described herein.

PRINT POST No. 231335/00041

OVERSEAS & LOCAL NEWS

OVERSEAS NEWS

The US FDA proposes to ban homeopathy

As mentioned in an earlier Newsletter the campaign by Australia's NH&MRC to remove homeopathy from private health coverage was part of an international campaign to suppress any natural medicines and practitioners who compete with conventional doctors. In Australia it also involves removing alternative practitioners' services from the list pf services that private health insurers are allowed to cover. The NH&MRC first asked a company to evaluate homeopathy. When the company found that homeopathy was beneficial in several situations the NH&MRC suppressed the report and asked another company to come up with the right answer. The new company closely followed the technique used in the UK that involved cherry-picking randomised con-trolled trials that showed no benefits and omitting any such trials that did show benefits. The NH&MRC of course accepted their report that found no benefits.

The US FDA has avoided this obvious ploy and used a different technique to suppress homeopathy. See page 8.

LOCAL NEWS

Surgery

Wiser Healtcare is a group trying to implement the principles of evidence based medicine.

The article by Professor Ian Harris on page 1 is an example of the work they promote. It focuses on the limitations of surgery and refers to his book "Surgery, The Ultimate Placebo — A Surgeon Cuts Through the Evidence". However in his book he does not appear to include cancer surgery in his discussion about the types of surgery that have not been proven to provide benefit. So I have included extracts from the CISS archives to fill this gap. See page 5.

CISS Committee positions

Members of CISS are invited to nominate for one of the three vacant positions on CISS' governing Committee.

The three positions are ordinary Committee members who advise on how the Society can best promote its message among the general public. Meetings are monthly, typically on a Monday at 7pm.

For further details contact Don Benjamin, General Manager, on 0416 121 140.

Don Benjamin, Editor

Immunotherapy

Another area for discussion is immuno-therapy. Trevor Stewart sent in an article by Richard Ablin, the discoverer of the PSA test. The references to that article included one about cryosurgery of the prostate that had identified an interesting phenomemon: freezing a prostate tumour instead of cutting it out can result in the tumour going into remission. Also, surprisingly, secondaries of the prostate tumour can also disappear. This suggests that the immune surveillance system that identifies abnormal cells can pick up antigens from these abnormal prostate cells—resulting in the immune system seeing them as a potential threat.

So this has prompted a reassesment of immunotherapy to include cryoimmuno-therapy. See pages 9 and 10.

Another interesting thing about this is that the immune surveillance system does not differentiate between abnormal "primary" tumour cells and abnormal "secondary" tumour cells. Perhaps this is more evidence in support of James Devitt's hypothesis that suggests that metastasis does not exist and that so-called "secondaries" are part of the same sytemic cancer process, not a result of spread form the "primary" tumour.

Immune Checkpoint Inhibition

There has been a lot of hype recently about a relatively new type of immuno-therapy called Immune Checkpoint Inhibition (CPI or ICI). Like most other cancer breakthroughs the hype has gradually been replaced by a realisation that what sometimes works in mice often doesn't work in humans.

For example a recently publshed paper states:

"..The implementation of immune checkpoint inhibitor therapy across solid tumors in recent years has been heralded by much enthusiasm given the promise of deep, durable therapy responses previously unseen in the treatment of advanced-stage malig-nancies. Although the therapy landscape of metastatic prostate cancer has changed consider-*ably in the past decade – driven by success with novel agents and combinatorial approaches – enthusiasm for checkpoint inhib-ition (CPI) in prostate cancer has been tempered by limited efficacy demonstrated in clinical trials..."*

However before this was recog-nised the drug companies have taken the results of the early trials to cash in on the new 'break-through' and established a new section in the cancer industry, as happened with chemotherapy in the 1950s, cancer screening in the 1970s and genetic testing for cancer in the 1990s. As with chemotherapy, Immune Checkpoint Inhibition therapy has been accep-ted widely by oncologists as the great new treatment for cancer despite the lack of benefit (increase in survival of about 6 months) and its serious side effects.

We explore the real situation with CPI on page 11.

To see the significance of drugs in the cancer industry, it has been estimated that revenue from anti-cancer drugs by 2024 will reach $236.6 billlion worldwide. That is more than the next five drug cate-gories combined. (Diabetes, Rheu-matics, Vaccines, Antivirals and Immuno-suppressants)

Ref: EvaluatePharma World Pre-view 2019, Outlook for 2024.

Mouse Studies and the media

As mentioned above the results from studies with mice can result in a new industry growing up with a new drug. The fact that later trials with humans might show minimal benefits is often overlooked in the same media. There appears to be a reverse situation when it applies to an alternative approach to health treatments.

Writing in What Doctors Don't Tell You (May 2020) Rob Verkerk notes that the Ketogenic Diet that has been shown in several human trials to provide benefits in obesity, type 2 diabetes and other chronic prob-lems suddenly becomes useless for weight loss and obesity in humans as a result of media reporting of the results of a single poorly run mouse study.

*Ref: Nat mMetab 2020;**2** : 50-61.*

(continued on page 10)

productive. For example, for a surgeon to invent and perform a new technique (perhaps yet another way to perform hip replacements), there is no regulatory oversight, either from the government or from institutional ethics committees: it is not necessary to get ethics committee approval to trial new procedures or techniques.

However, if the surgeon wanted to gather information on the effectiveness of a new technique by performing a comparative study against the old technique or contacting patients to accurately measure the results of surgery, that surgeon would not be permitted to do so without approval from an ethics committee.

So it is OK to try new things without measuring the outcome or studying it scientifically, but if you want to find out if it works or is not harmful, you are faced with an onerous process of getting ethics approval to contact the patients and publish the findings. Many would argue the exact opposite, that ethical approval should be required if a surgeon did not measure and report the results of a new technique.

Changing the paradigm

This problem reflects our underlying tendency to assume that something is effective when it has not been tested: we end up with wasteful, ineffective and often harmful procedures and devices being approved and used. At best, we end up with procedures with unknown effectiveness.

There is no good reason to have such a low bar for the introduction of new devices and techniques. The reason we have such a low bar is tradition, which is almost never a good reason.

The reason for this low bar is that many (probably most) of the currently performed surgical procedures listed in the Medical Benefits Schedule (MBS) were "grandfathered" in when the scheme began in the 1980s. Many have never been subjected to rigorous testing against non-surgical alternatives or no treatment at all. The only time rigorous evidence (an appropriate bar) is required for a new surgical procedure or device is if it does not lie within descriptions currently listed in the MBS. In these cases, applications for listing new surgeries are frequently rejected for failing to have sufficient high-quality evidence.

The system needs overhauling, but the inertia inherent in the current systems is such that this may never occur. It may be a massive task to test (already approved) surgical procedures that lack good evidence for effectiveness, but that doesn't mean we should never start. It wouldn't be too hard to begin with a few procedures and build up the evidence over time.

For example, instead of funding spine fusions for back pain indefinitely, why not put the money into trials of effectiveness? This could potentially save billions of dollars and patient harms. Any resulting savings could be put into testing the next procedure on the list. This could be done with one simple decision from the government: to make the bar for procedures currently on the MBS (that were grandfathered in in the 1980s) the same as the bar for new procedures to be listed on the MBS. Otherwise, it must justify having such a paradoxical system of approval.

FROM:
Raising the bar for surgery - Wiser Healthcare. Editor: Jennifer Doggett
www.wiserhealthcare.org.au › raising-the-bar-for-surgery 23 March 2020
Ian Harris is Professor of Orthopaedic Surgery at UNSW and the author of Surgery, The Ultimate Placebo*

*Surgery, The Ultimate Placebo— A Surgeon Cuts Through the Evidence

By: Ian Harris

Published: 1st March 2016
ISBN: 9781742234571
Number of Pages: 224

For many complaints and conditions, the benefits from surgery are lower, and the risks higher, than you or your surgeon think. In this book you will see how commonly performed operations can be found to be useless or even harmful when properly evaluated. That these claims come from an experienced, practising orthopaedic surgeon who performs many of these operations himself, makes the unsettling argument particularly compelling.

Of course no surgeon is recommending invasive surgery in bad faith, but Ian Harris argues that the evidence for the success for many common operations, including knee arthroscopies, back fusion or cardiac stenting, become current accepted practice without full examination of the evidence. The placebo effect may be real, but is it worth the recovery time, expense and discomfort?

About the Author:
Professor Ian Harris is an orthopaedic surgeon who works at Liverpool, St George, St George Private and Sutherland Hospitals in Sydney. His academic affiliation is with UNSW, South Western Sydney Clinical School at Liverpool Hospital, in Sydney.

Comments from Don Benjamin

As mentioned in his book (above) Ian Harris refers to the fact that "For many complaints and conditions, the benefits from surgery are lower, and the risks higher, than you or your surgeon think."

He also says "Put simply, a lack of evidence allows surgeons to do procedures that have always been done, those that their mentors taught them to do, to do what they think works, and to simply do what everyone else is doing. Relying on tradition and unsupported perception frequently leads to an incorrect assessment of the effectiveness of the treatment, and is therefore not good enough."

This is especially true of cancer surgery. However I was not able to identify what Ian Harris believes about the efficacy of cancer surgery.

Many doctors have claimed that in their opinion surgery is not a useful approach to dealing with cancer. As long ago as 1970 Sir John Bruce, Regius Professor of Clinical Surgery at Edinburgh University and past President of the Royal College of Surgeons, stated that 'The future (of cancer treatment) lies elsewhere than in the operating room; but when the answer is eventually found, the surgeon will have no cause to be ashamed of his attempts to relieve suffering and not infrequently avert the arrows of death in one of the greatest scourges of mankind'.

In 1974 Miles Little, Professor of Surgery, addressing a cancer conference at Sydney University, stated that: "Despite refinements in surgical technique and management, and increasingly radical surgery, there is considerable doubt about fhe impact of surgery on the natural history of most malignancies. The apparently logical hypothesis that earlier diagnosis and more radical excision would lead to more cures, has not been borne out in practice. Surgery brings a mechanical approach to a biological problem."

I have therefore included extracts from a paper I wrote in 1993 on cancer surgery to address this issue.

(Continued next page)

The Efficacy of Cancer Surgery

by Don Benjamin

In 1993 I published a paper in which I described how I set out to evaluate the efficacy of surgery for cancer.[1]

This was the culmination of nearly 10 years of looking for evidence that started in about 1983 when the CISS Committee asked me to evaluate the three main cancer treatments: surgery, radiotherapy and chemotherapy. To my surprise I could not find a single randomised controlled trail that showed that cancer surgery, ie cutting out a malignant tumour, resulted in an increase in survival. As Ian Harris says, the standard method of evaluating medical interventions before they become accepted for clinical use and government reimbursement, whether it is a drug or a new technique, is usually a randomised controlled trial, often with patients 'blinded' to what treatment they are receiving (although 'blinding is usually impossible for surgery).

But this never happened with cancer surgery. So I set out to find other ways of showing that surgery was effective. These included:

1. The graphical method

There are fundamentally three types of mortality curves - concave upwards representing increasing with the duration of the disease; a straight line, representing constant mortality, unaffected by the duration of the disease; and concave downwards, representing decreasing mortality with duration of the disease.

'Commonsense' among medical workers would lead to an expectation that most diseases will follow either the first or third type of curvature. In 1956 Professor Hardin Jones from the Medical Physics Dept at University of California at Berkeley found that for chronic diseases, including both heart disease and cancer, the subpopulations of people with these diseases lie on a constant slope mortality rate curve. Contrary to conventional wisdom, they neither get over their disease (as is assumed with heart disease) nor get worse with time (as is assumed with cancer). The mortality rate with cancer simply increases with age, the rate continuing to double ever 8.5 years.

Reduction in the mortality rate following surgery or other interventions would result in patients dropping onto a lower mortality rate line. In this way Jones was able to demonstrate that, after correcting for poor methodology, all patients with a particular form of cancer experienced the same mortality whether treated or not, once the cancer was of established malignancy.

2. Comparative studies

Another useful source of evidence for the efficacy of surgery is the comparative study. By comparing the mortality of different groups of cancer patients who have undergone different degrees of surgery it is possible to evaluate the efficacy of surgery itself. According to the rationale for cancer surgery, it is important to remove all malignant cells; otherwise the remaining cells will continue to grow. Therefore the more extensive the surgery, the less the likelihood of any malignant cells remaining and the lower the mortality rate should be.

If this rationale is invalid, and tumours are only local, late-stage symptoms of a systemic disease, there would be no difference in mortality between groups receiving different degrees of excision. This has been tested for breast cancer using randomised controlled trials. There was no difference in survival between radical mastectomy, total (simple) mastectomy, quadrantectomy, segmental mastectomy (lumpectomy) and excisional biopsy.

3. Increased survival rates

What is the explanation for the apparent improvement in the percentage 5-year survival rates for all cancer sites between 1960 and 1975 as claimed by the American Cancer Society at the time?

Epidemiologists Peto and Easton identified several methodological problems in these claims, including the obvious one that by finding the tumour earlier (eg by screening), death still occurs at the same time but the existence of the cancer has been known for a longer time, leading to an 'apparent' increase in survival. None of the cancer types showed any increase in percentage survival over this period that couldn't be explained by this or other factors.

4. Comparison of incidence and mortality

Enstrom and Austin concluded that a better measure of progress in cancer treatment is to compare the incidence of each type of cancer with the mortality rate over the time interval in question. For, so long as incidence and mortality remain unchanged, or change proportionately, no genuine change in survival can occur. Progress in cancer control requires that the mortality rate decline more rapidly or rise more slowly than the incidence for the particular type of cancer. For most types, the incidence and mortality have changed by the same amount within the limits of uncertainty of the statistics. Only in the case of prostate cancer can some claim be made for improved survival due to treatment. But this can be explained by the introduction of prostate cancer screening that finds a majority of tumours that are not life-threatening - overdiagnosis. This increases the incidence without affecting mortality.

5. Epidemiological studies

Another useful type of information for testing the efficacy of surgery is the epidemiological tables of mortality which enable international mortality trends to be compared and correlated with social changes and the introduction of new diagnostic techniques such as screening. From the mortality curve for breast cancer there is no significant change observed after the introduction of breast cancer screening. Similarly the mortality curve for prostate cancer was not affected by the introduction of PSA screening.

There are claims that the mortality curve for cervical cancer was affected by the introduction of the Pap test in the early 1950s. However other epidemiologists claim that the constant downward slope of the mortality curve began in the mid-1930s and the slope did not change with the introduction of the Pap test 20 years later.

6. Comparison of survival after treatments based on different hypotheses

As of the easrly 1990s the best 5-year survival statistics have been produced using therapies based on the hypothesis that cancer is a systemic disease, and tumours are only local symptoms. Therefore the cancer patient should be treated using a therapy designed to restore the body's own natural immune system.

After undergoing such a therapy, terminal cancer patients showed a 16.6% 5-year survival compared with about 2% expected with conventional therapies and a 15% 15-year survival compared with less than 1%. With preterminal patients there was an 85% 5-year survival compared with about 50% with conventionl treatment. Incidentally Josef Issels, whose immunological-based treatment produced these statistics, nearly always used surgery – to remove a load on the body and minimise the amount of toxins the body had to deal with as the tumour dissolved as the immune system kicked in.

So all of these six indirect methods of measuring the efficacy of cancer surgery suggest that cancer surgery does not have a significant effect on survival or mortality once cancer is of established malignancy. This resulted in CISS questioning the orthodox cancer paradigm—as shown by our current research project.

What is Cancer?

The question then becomes "Why was surgery exempted from the requirement of proof of efficacy? It comes back to "What is cancer?". The commonly held assumption is that the tumour is the disease; so cutting it out must remove the disease. Very few people today, especially surgeons, would question this assumption that originated over 170 years ago. One notable recent exception is James Devitt, a retired surgeon who was the keynote speaker at the Lancet Conference "The Challenge of Breast Cancer" in Belgium in 1994 (where I gave a presentation that became my 1996 paper questioning the benefits of mammography screening[2]).

He concluded after a career as a surgeon that cancer, not just breast cancer but all cancer, must be a systemic disease. He suggested that cancer types are named by the type of systemic cancer that is first found in a particular location; eg breast cancer is a systemic disease where the most susceptible tissue for the tumour growth is in the breast. If later found in other parts of the body it is not because it has spread via the blood or lymph system, but because it is in the next most susceptible tissue for that type of cancer in that person. So Devitt believes that metastasis is not a proven process.

1. *Benjamin, DJ. The efficacy of surgical treatment of cancer. Medical Hypotheses 1993; 40 (2): 129-138.*
2. *Benjamin DJ. The efficacy of surgical treatment of breast cancer. Medical Hypotheses 1996; 47 (5): 389-97.*

Many reading these comments might well ask: What about the woman whose malignant breast tumour has broken through to the outside and is fungating? This is clearly a case where surgery is appropriate. Unfortunately there are no trials to assess whether or not it extends life.

Healing Migraine

Tony Bateson vividly remembers the first time he ever had a migraine attack. "I was 67. It was four in the afternoon and I was driving alone in heavy traffic and very strong sun. I felt a blow on the back of my head followed by extreme downward pressure. My vision diminished. I thought I was having a stroke and was going to die. It was terrifying."

Tony managed to get off the highway and pull into a service station, where he sat in his car for two hours, unable to do anything. "I was incapacitated," says Tony. "I couldn't even call my wife to tell her I was going to be late home." Gradually, Tony regained his sight and felt well enough to drive home, confused about what he had experienced. It was only months later he realized he'd had a migraine.

After that, Tony started to suffer from migraines in clusters. 'I'd have three or four attacks in a week, then nothing for a few months, until the next cluster;' says Tony, who is now 87 and lives in Oxford, UK.

The attacks would last for an hour and a half to two hours, during which time Tony would be "completely out of it." This continued for four years.

But in 2005, something happened that broke the pattern. "I was driving on my own and had exactly the same type of migraine I had the first time;' says Tony. "But this time I lost my temper. I started ranting and raging—yelling expletives in the car." Remarkably, the migraine quickly went away—something that had never happened before. Usually, a migraine attack for Tony would be so debilitating he couldn't do anything for at least a couple of hours. He was amazed that on this occasion, he was able to continue as normal, and even to carry on with his studies that evening at Oxford University, where he was a mature student….

This happened several times until Tony thought he must be onto something. He then began reading everything he could about migraine, with the goal of trying to find out how his yelling could have possibly stopped his migraines. In particular, Tony was fascinated by ancient forms of sound healing such as mantra meditation. "Mantras are used in Hinduism, Buddhism and Sikhism", he says. "There's science to show that chanting mantras such as 'OM', which produces vibrations, can have powerful effects on the brain."

After reading some 40 books, attending Buddhist retreats and speaking to people from traditional communities. Tony hypothesized that the vibrations produced by his "ranting and raging" were vital for the effect it had on his migraine…

Tony eventually settled upon a method that involves humming at a particular frequency - 140 Hz - in a rhythmic sequence interspersed with nasal breathing. "This frequency is near to that of the OM sound, also known as 'the sound of creation'" says Tony. "It's also equivalent to the sound of the mother's body when the baby is in the womb. It's comforting and reassuring".

Tony found that he was able to successfully use this method in the early stages of a migraine to prevent it developing into a full-blown attack.

The migraine method

The method is designed to be used as a migraine "intervention" - that is, a method to stop an attack when one strikes rather than to prevent migraines in the first place. It's said to work best when used in the early stages of a migraine, known as the "prodromal phase," when sufferers experience warning signs such as irritability, excessive yawning, food cravings and sensitivities to light or sound. Consult with your doctor if you are taking any medication or have underlying health conditions.

How to hum

Hum with your upper and lower jaw held lightly together (not clenched), teeth touching. The hum should come from the back of the throat and be 140 Hz. You can use a pitch pipe set to low C sharp to get the right sound frequency. Try to hum with a regular rhythm throughout the exercise.

The exercise

1. Hum for 10 seconds
2. Take a deep breath in through the nose
3. On the exhale, hum again for 10 seconds
4. Repeat this until you have done 10 hums, taking deep breaths in through the nose after each hum
5. Rest for 2 minutes
6. Repeat the sequence of 10-second hums 10 times, followed by a 2-minute rest
7. Repeat the sequence one more time (so you've done three sets of 10-second hums, 10 times each set, with a 2-minute rest in between)
8. Rest for 10 minutes

The entire exercise should take about 10 minutes, followed by 10 minutes rest at the end. (FROM: WDDTY May 2020)

Vitamin B3 and Arthritis

The most frequent treatment for arthriris in elderly patients is Non-steroidal anti-inflammatory drugs (NSAIDs) like Aleve, Motrin and Advil. These are known to elevate the risk of heart attack and stroke. Other effects are links to gasto-intestinal ulcers and acute kidney injury. *(USFDA, Drug* Safety Communication, July 9, 2015)

Doctors also prescribe opioids that can cause addiction and overdose problems as well as increased pain, liver damage, infertility, insomnia and nausea. *(Health Canada, About Opioids)*

An alterntive discovered in the 1940s is Vitamin B3. In a 1949 paper "The Common Form of Joint Dysfunction" Willam Kaufman described how he treated many of his arthritis patients with vitamin B3 in the form of niacinamide. He prescribed it at the relatively high level of 1000 mg a day in a divided dose.

Abram Hoffer later found that high-dose Vitamin B3 helped 80% of his patients with schizophrenia. Following Kaufman's 1949 report Hoffer in 1959 found remarkable joint improve-ment with six if his patients while taking vitamin B3 either as niacin/ nicotinic acid or niacinamide.

Clinicians at the Mayo Clinic in the 1950s found that vitamin B3 as niacin significantly improved the lipid profiles of cardiac patients. It reduced the "bad" cholesterol and serum triglycerides while raising the "good" HDL cholesterol.

In 1996 the US National Institutes of Health (NIH) tested vitamin B3 on 72 patients who had had osteoarthritis for at least 5 years and were taking NSAIDs daily for pain. Those taking niacinamide experienced an overall improvement of 29% over the 12-week study compared with those on placebo, whose condition worsened by 10%. Pain levels did not change but those on niacinamide reduced their NSAID intake by 13%.

Side effects: High levels of niacin can result in liver toxicity within 7 days that is apprently not experienced with niacinamide. Kaufman claimed that niacinamide had not produced adverse side-effects with his "thousand patient-years of use".

FROM: What Doctors Don't Tell You May 2020

Nicotinamide is another name for niacin-amide. It is a water soluble form of Vitamin B3 and doses higher than needed are simply flushed out of the body. High-dose Niacin however can cause significant adverse effects. SEE https://en.wikipedia.org/wiki/Niacin

What is a high dose?

The dietary reference intake (DRI), a term that is replacing the older and more familiar RDA (recommended daily allowance) for vitamin B3/niacin is ~14-16 mg with a maximum of 35 milligrams per day. Taking it with food minimises certain side effects. So anything over 500mg is a high dose. [Ed.]

FROM: https://www.webmd.com/diet/supplement-guide-niacin#1

Other alternatives for treating arthritis

Apart from vitamin B3 there are several other methods often used for the treatment of arthritis. These include

Food:Eat foods that reduce inflammation such as fish, nuts and seeds, fruits and vegetables, beans, olive oil and whole grains such as are found in the *Mediterranean Diet* and avoid foods such as nightshade vegetables, such as tomatoes, (that contain a chemical called solanine that some studies have linked with arthritis pain). Avoid refined, processed foods and pro-inflammatory animal-derived foods and choose whole plant foods that are high in antioxidants and that have anti-inflammatory properties. This is the most popular theory in relation to osteoarthritis with sugar being an important contributory factor (WDDTY August 2018)

Lifestyle: These include

- staying physically active;
- achieving and maintaining a healthy weight;
- protecting joints from unnecessary stress;
- learning to manage fatigue is key to living comfortably with arthritis;
- Exercising. This is beneficial for managing arthritis and overall health, balancing activity with rest: In addition to remaining active, rest is equally important when your disease is active;
- improving sleep: poor sleep can aggravate arthritis pain and fatigue. Take steps to improve sleep hygiene so you find it easier to fall asleep and stay asleep;
- avoiding caffeine and strenuous exercise in the evenings and restricting screen-time just before sleeping;
- not sitting in the same position for long periods. Take regular breaks to keep mobile;
- gettingt plenty of sunshine. Lack of sunshine applies particularly to rheumatoid arthritis (WDDTY November 2017)
- Balancing energy; treatments such as Bowen Therapy and Alexander Technique would be useful (WDDTY June 2007)

FROM:
https://www.medicalnewstoday.com/articles/7621#natural_remedies and
What Doctors Don't Tell You (various)

(continued from page 2)

enough glucose for their energy needs. This is type 2 diabetes.

But if the process instead goes into overdrive, then cells - and especially mutated, cancerous cells - get an abundance of glucose, which fuels the growth, and that is cancer.

It's exactly as Warburg saw the cancer process unfolding in his laboratory - healthy cells feed off oxygen, but cancerous cells instead feed off sugar, even though it is far less efficient. He called it "aerobic glycolysis:' In theory, the cancer cells can feed off oxygen too, but something happens to make them prefer sugar.

That "something" is a mutation that occurs earlier in the biological process and it happens because of an excess of insulin, Dr Cantley believes. The PI3K enzyme is mutated more often than any other gene, and he estimates it is responsible for 80 percent of all cancer including breast, brain and bladder.

The PI3K theory is still not widely accepted, but Cantley continues researching his hypothesis over 30 years after he first proposed it.[1]

Don't forget lactate

Resistance to the theory could be because there's something missing, as other researchers are seeing something else in the cancer puzzle where insulin plays no part at all.

Although sugar may kickstart the cancer process, another new theory suggests it's driven by lactate, a molecule usually found in muscles that causes athletes to stiffen up after a workout and, more seriously, is also a sign of sepsis and congestive heart failure.

Warburg had also seen lactate cluster around cancer cells, but he had assumed it was a useless byproduct - biological garbage.

(continued on page 11)

The US FDA proposes to ban homeopathy

For those of you who believe in natural medicine, you may be shocked to know that the US Food and Drug Administration has proposed to essentially ban homeopathy with draconian legislation that would give them sweeping powers to empty the shelves of homeopathic preparations.

The Alliance for Natural Health writes that the FDA has based its guidance on four major assumptions:

1. 'Any homeopathic drug that has not been considered "generally recognized as safe and effective" (GRAS/E) is considered a new drug;
2. FDA has not determined that any homeopathic drugs are GRAS/E;
3. A new drug cannot be marketed unless it goes through the FDA's approval process;
4. No homeopathic drugs have gone through FDA approval nor can any producer afford to take them through the approval process since homeopathic medicines have been in use for centuries and generally cannot be patented.'

What this means, in plain English, is that the FDA considers all homeopathic preparations to be marketed illegally. The agency proposes to focus its enforcement mechanisms against certain specific types of homeopathic medicines causing it safety concerns.

It cites a number of remedies that it has recalled to date, mostly because they were purported to be made in non-sterile production conditions or had microbial contamination or were intended for 'vulnerable' populations, such as pregnant women.

The FDA is within its remit to remove any contaminated health product off the shelves. But these sweeping new changes would give the FDA the power to take action to remove any homeopathic product that it doesn't deem to be safe.

As the agency points out: "This guidance is intended to provide notice that any homeopathic drug product that is being marketed illegally is subject to FDA enforcement action at any time."

In the FDA's information page about homeopathic products (https://www.fda.gov/drugs/information-drug-class/homeopathic-products), the agency is at pains to say, ' Products labeled as homeopathic can contain a wide range of substances, including ingredients derived from plants, healthy or diseased animal or human sources, minerals, and chemicals.'

This is a rather interesting *volte face*. For many years, the argument by science, medicine and agencies such as the FDA is that homeopathy is useless as a treatment because preparations have been diluted so

Lynne McTaggart

many times that patients are essentially being given water.

Homeopathic preparations follow the 'law of similars,' which is that a substance that can produce a set of symptoms in a healthy individual can be used to treat someone presenting with a similar set of symptoms.

But it was German physician Samuel Hahnemann who first developed this into a system of medicine after noticing that a healthy person ingesting quinine would go on to develop symptoms of malaria – the very illness quinine was used to treat.

After discovering that a number of substances used to treat illnesses at full strength caused unwelcome side effects, Hahnemann came up with the idea of serial dilution. Since his discovery, one drop of the original medicinal substance is added to 100 drops of water, and then a drop of that dilution is added to 100 drops of water, and so forth.

After each dilution, the liquid is shaken vigorously – a process known as 'succussion.'

So a homeopathic remedy with a medium potency of 12C—in other words, 1,200 dilutions or greater—is beyond the Avogadro number ($6.02214076 \times 10^{23}$), considered the final concentration at which any molecule of the original substance will be present.

Many homeopathic remedies have potencies of 30C, 200C or even more, so that the final remedy is something like 1,000,000,000,000,000,000,000,000 times more dilute than the original substance.

It is the high dilution mechanism of homeopathy that has caused most of conventional science and medicine to dismiss it as 'nothing but water,' even though countless studies show homeopathy's benefit for a huge range of conditions – one reason that it is recognized and sanctioned in many European countries and paid for by their national health services.

Now, however, it is suddenly the case that this 'useless' medicine is suddenly filled with all sorts of dangerous substances. The problem, of course, is that conventional science cannot really account for how on earth homeopathy could work.

However, the New Science offers many clues. The late Giuliano Preparata and Emilio Del Giudice, two Italian physicists at the Milan Institute for Nuclear Physics, demonstrated mathematically, and other scientists like the late French biologist Jacques Benveniste, showed experimentally, that single wavelengths of water molecules appear to become 'informed' in the presence of other molecules — that is, they tend to polarize around any charged molecule — storing and carrying its frequency so that it may be read at a distance.

This would mean that water may act like a tape recorder, imprinting and carrying information whether the original molecule is still there or not.

These radical ideas were vindicated by the work of French scientist and Nobel Laureate Luc Montagnier, co-discoverer of the human immunodeficiency virus (HIV), who has carried out experiments showing that some bacterial and viral DNA sequences can induce low-frequency electromagnetic waves at high aqueous dilutions.

As Montagnier concluded, "High dilutions of something are not nothing. They are water structures which mimic the original molecules."

Homeopathic medicines have nothing but the energetic footprint of active substances - nothing but water as far as mainstream medicine is concerned.

However, suddenly, FDA deems them to contain 'measurable amounts of active ingredients and therefore could cause significant patient harm.'

Be in no doubt that this is political maneu-vering by a corrupt agency that is poacher turned gamekeeper. Although 55 percent of the FDA's budget is paid for by the US government, the remainder is paid for by 'industry user fees' – most of that from the drug and Big Food industries. It is yet the latest attempt to get rid of a well-established arm of natural medicine.

However, there is one small encouraging sign. The FDA has not yet issued its final guidance on the subject – just another draft of its proposal.

As Rob Verkerk, the ANH director wrote: 'This is an indication that our voices are being heard and the FDA is worried about political push back from voters who are members of the natural health community.'

May 22nd, 2020
Posted In:
Lynne Mctaggart Blog

Many men get treated for prostate cancer unnecessarily by Richard Ablin

The following article appeared in New Scientist on 12 February 2014. Richardd Ablin is interviewed by Tiffany O'Callaghan

“Many men get treated unnecessarily – and risk life-altering side effects including impotence and incontinence”

Pathologist Richard Ablin discovered the PSA antigen 40 years ago. He says it should never have been used as a cancer screening tool for all men

'Prostate cancer test has been misused for money'

Q. Your book condemns the use of PSA for cancer screening. What do you hope to accomplish?

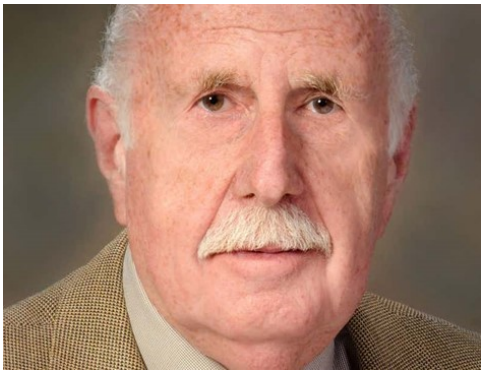
A. I hope to expose how the urology community and drug industry misused the PSA test, putting money over the best interests of patients. I also want to show how the US Food and Drug Administration failed in its duty to the public: its advisers warned that routine PSA screening would cause a public health disaster, but it was approved under pressure from advocacy groups and drug companies.

Q. How did you discover PSA back in 1970?

A. In animals, freezing prostate tissue in situ produced an immune response – antibodies to proteins in the tissue. We did a trial of the freezing technique in men with prostate cancer that had spread, and saw regression. I wondered if freezing spurred an immune response by releasing a cancer-specific antigen, or protein, from the prostate tissue. So I studied prostate tissue and I found an antigen, but it was characteristic of normal and malignant tissue – specific to the prostate, not to the cancer.

Q. That is one of four major concerns you highlight about PSA. What are the others?

A. So, **first** is that PSA is not cancer-specific. **Second**, the level of PSA deemed worrying is arbitrary – 4 nanograms per millilitre or higher. As PSA is not cancer-specific, no level is



Professor Richard Ablin

diagnostic. **Third,** prostate cancer can be aggressive or, more often, very slow-growing. We can’t tell which is which.

Last, many men will develop prostate cancer by age 70. If an older man has a PSA level that prompts a biopsy, it is likely you will find cancer. Since you can’t tell if it’s aggressive, many men get treated unnecessarily – and risk life-altering side effects including impotence and incontinence.

Q. But surely PSA has its diagnostic uses?

A. PSA can be a useful predictor of recurrence; after treatment for prostate cancer, if the PSA level increases it can indicate they didn’t get all the tissue, or that cancer that began in the prostate has spread. But that is not how it is primarily used.

Q. You note that men with a family history of the disease may benefit from PSA tests to watch for major changes. As your father died of prostate cancer, does that include you?

A.If your father had prostate cancer, your chances are 2:1, so theoretically you may benefit from PSA monitoring. But the decision depends on how well you deal with risk. My father was diagnosed at 67. He died a year later. I am 73. If I had a biopsy today, there’s an 80 per cent chance that I would have prostate cancer. But the data show that at my age treatment wouldn’t extend my life, and it would be likely to leave me with debilitating side effects.

Q What do you advise men grappling with this?

A. Ideally, it should be an informed decision between a man and his doctor. The unfortunate reality is that no current data show that men who undergo PSA screening live longer than men who decide against it. So if you have no symptoms, no family history of prostate cancer, and a normal digital rectal exam, I would say, do nothing. Because once you’re on that train, it’s hard to get off.

Richard Ablin is professor of pathology at the University of Arizona. He discovered PSA in 1970, and co-wrote The Great Prostate Hoax: How big medicine hijacked the PSA test and caused a public health disaster (Palgrave Macmillan)

Cryosurgery for prostate cancer resulted in the metastases disappearing as well

Trevor Stewart reports that he attended a Conference in 2014 where he heard Richard Ablin report on a case where cryosurgery had been used to shrink a late-stage prostate cancer with great success. However what was not suspected was that the metastases also disappeared. The explanation was that the cryo-surgery must have stimulated the immune system to remove the remaining malignant prostate cancer cells and in so doing also eliminated the metatstases.

Following up the references in Richard Ablin’s article identified an interesting article about prostate cryo-immunotherapy, ie freezing malignant prostate tumours instead of cutting them out.

This suggests that the immune surveillance system that identifies abnormal cells can pick up antigens from these abnormal prostate cells—resulting in the immune system seeing them as a potential threat wherever they are.

So this has prompted a reassessment of immunotherapy to include cryo-immunotherapy. See below.

CryoImmunotherapy

The above article refers to cryo-immunotherapy, a technique developed in the 1970s following the discovery that frozen tissue develops antigens that the immune system can react to. In 1972 the discoverer of the PSA test, Richard Ablin, had a letter in the British Medical Journal giving the results of five metastatic prostate cancer cases that had been treated with multiple in situ freezing of their prostates and one after a single freezing (case 6) that had resulted in their metastatic tumours in the cervical spine, lung, cervical lymph nodes, pelvis or lumbar spine going into remission. See Table alongside

Case	Age	Site of Metastases*	Clinical Response
1	68	4th/5th Cervical Vertebrae	Remission
2	69	Lung	”
3	51	Cervical Lymph Nodes	”
4	67	Left Pelvis/Symphysis	Healing
5	51	Lumbar Spine/Pelvis	Remission
6	66	Lung	”

*Determined by histology or by x-ray

Cancer and the Immune System

by Don Benjamin

There are several theories about the relationship between the immune system and cancer. Most theories accept that the immune system consists of several components such as macrophages, white blood cells and certain red blood cells such as erythrocytes. Each of these has a different function. However considering the immune system as a whole, it was previously hypothesised that there was an immune surveillance system[1] Although there remains little information about how this surveillance system works, there are three main theories about how it would work:

1. The immune system is only effective against foreign cells.

According to this theory the immune system is not effective against cancer cells because they are abnormal rather than foreign (non-self) cells.

A variation on this theory states that cancer is a protective mechanism that encapsulates dangerous foreign cells such as bacteria when the body's immune defences are no longer capable of destroying the foreign cell. If the immune system can be stimulated into action and the encapsuated bacterium can be made to show its presence beyond the tumour's outer layer, the bacterium can be destroyed and the tumour, being no longer needed, dissolves[2].

Recent research into monoclonal antibodies uses the approach that tumour growth can sometimes be linked to a particular gene so if that gene can be targeted by the antibody the tumour growth can be controlled.

2. **The immune system is only effective against cells that pose a threat to the body.**

According to this theory the immune system is called into play only when the foreign cell causes damage. The damage itself results in a signal being transmitted to the immune surveillance system. This in turn identifies and flags the damaged cells and natural killer cells are sent to destroy the damaged cells[3] (If a foreign cell or bacterium is involved in causing the damage it is possible that it gets consumed in the process.)

3. **The immune system has different components, some of which respond to the presence of abnormal cells.**

As cancer cells are abnormal rather than foreign cells, these immune components prevent malignant cells from growing. Certain types of chronic stress suppress these components. As a result cancer cells can grow. For example under chronic stress the adrenal gland puts out cortisol which suppresses Natural Killer (NK) cells that attack cancer[4].

What we think and feel influences both the functioning and effectiveness of the immune system[5]. Some evidence for this theory is provided by studies showing a dramatic reduction in cancer among cancer prone individuals following a particular type of psychotherapy[6].

A variation on this theory used at the IAT Center in the Bahamas states that cancer cells produce a "tumour complement" that triggers tumour antibody activity (via the Natural Killer cells - NK) that tries to repair or destroy the cancer cells. To limit the rate of tumour cell death to a level that the liver can handle, the body produces "blocking protein" that shields the tumour from further attack if the tumour necrosis rate exceeds the liver's capacity to dispose of dead cells. In late-stage cancer patients this "blocking protein" component remains triggered all the time preventing further attack on the tumour.

This is why, once a tumour reaches a certain size, the immune system can no longer identify it as abnormal and destroy it. Treatment then requires increasing the level of tumour antibody, tumour complement and deblocking protein[7].

The recently developed Immune Checkpoint Inhibition therapy is similar to the IAT approach but without the critical control provided by the blocking protein. (See page 11)

Another variation of this theory states that immune activity relies on the presence of certain substances. For example Natural Killer (NK) cells are active only if they contain relatively large amounts of Vitamin C[8].

Still another version of this theory states that there is an immunological response to the antigens of frozen tissue, ie a cryoimmune response to these abnormal cells[9] (See page 9)

Immunity boosters include:

- Iscador (a particular type of mistletoe) - usually via injections
- Beta carotene
- Siberian Ginseng
- Intravenous vitamin C
- Lentinan (present in shiitake mushrooms)
- Coley's Toxins
- Cryoimmunotherapy

REFERENCES

1. Burnet, FM. The Concept of Immunological Surveillance. Progress in Immunological Tumor Research 1970; **13**: 1-27).
2. Sam Chachoua: Induced Remission Therapy: Our best hope against cancer? Nexus New Times Magazine. Part 1, Dec 1997. Part 2, June 1998.
3. Larkin M. Polly Matzinger :Immunology's Dangerous Thinker Lancet (Jul) 1997; **5**;350(9070):38.
4. Meuleman, J and Katz, P. The Immunologic Effects, Kinetics, and Use of Glucocorticosteroids. Medical Clinics of North America 1985; **69**: 805-816).
5. Blalock, JE. The Immune System as a Sensory Organ. Journal of Immunology 1984; **132**: 1067-70.
6. Eysenck, HJ & Grossarth-Maticek, R. Behav Research and Therapy 1991; **29** (1): 17-31).
7. Burton, L. Immuno-Augmentative Therapy. Cancer Research and Treatment. IAT Centre, Freeport, Bahamas, 1988.
8. Yonemoto, RH. Vitamin C and the Immunological Response in Normal Controls and in Cancer Patients (Portuguese) medico dialogo 1979; **5**: 23030.
9. Ablin RJ. Cryo-Immunotherapy. Br Med J. (19 Aug) 1972;**3** (5824): 476

(continued from page 3)

Healing migraine

Migraine headaches are one of life's most debilitating problems for those who suffer from them.

One novel approach is the use of humming using a particular sound similar to the mantra "OOM" used by Buddhist monks. See page 6.

Vitamin B3 and arthritis

Another debilitating problem is arthritis. Although most doctors prescribe NSAIDs or opioids for this condition—that often have have serious side effects—an alternative is high-dose vitamin B3, particularly in the form of niacinamide. See page 7.

(continued from page 12)

and that future generations would recognize his discoveries. As a reassurance, he had a framed quote from quantum physicist Max Planck that he kept above his desk: "A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die."

FROM: WDDTY May 2020

References available from the CISS Office

Immune Checkpoint Inhibition

by Don Benjamin

There are other areas of immuno–therapy that have been developed in recent years including the use of drugs like interferon and interleukin. A more recent development is Immune Check- point Inhibiiton (CPI or ICI).

Earlier enthusiasm for these newer types of immunotherapy have been tempered by limited efficacy demonstrated in clinical trials that have also identified harmful side-effects.

The following is a brief report that provides a contrast of ICI with a more sophisticated therapy—IAT from the 1970s.

These relatively recently developed CPI drugs are based on the same principle that Dr Lawrence Burton used at the Immuno-Augmentative Therapy (IAT) Center in the Bahamas in the 1970s. According to Burton the immune system has four components: Tumour complement, tumour Blocking protein, tumour Deblocking protein and Tumour Killer antibodies.

According to John Clement from the IAT centre:

> "In the normal healthy person any mutant cancer cells are recognized and antibodies attempt to destroy them; this reaction is promoted by Tumour Complement (TC), which is produced by cancer cells, and is the effective signal to the antibodies to destroy that cell. The necrotic tumour cells are then passed to the liver to be "sanitized." If tumour cell necrosis occurs too rapidly the liver can be overloaded, leading to production of Blocking Proteins which shield tumour cells and slows down the antibody reaction to those cells.
>
> Patients with cancer may have very high levels of this Blocking Protein. Deblocking Proteins neutralize this blocking action and so enable antibodies to access the tumour cells. Patients with cancer tend to have a deficiency of Deblocking Protein.... In order to effect this control you need Tumour Complement produced by the cancer cell to alert and activate the Antibodies and you also need sufficient Deblocking Protein to neutralize the Blocking Protein and allow the antibodies access to the cancer cells."

The IAT treatment involves daily sampling of the cancer patient's blood to measure the relative proportions of these four factors. To boost the deficient ones slightly, these deficient factors are provided from the blood of a healthy person who accompanies the cancer patient. The blood is then reinjected into the patient. The same procedure is repeated each day, gradually building up the proportions to the optimum levels so that the patient's tumours start to be attacked by their own now normally-functioning immune system. It is claimed that this approach works in about 25% of those who attend the Center.

Immune Checkpoint Inhibitors

Unlike the approach at the IAT Center, oncologist who use Immune Checkpoint Inhibitor (ICI) therapy drugs only administer one: the one that is similar in operation to the Complement and Deblocking proteins used at the IAT Center but without the Blocking protein that would slow down and control the rate of tumour kill. As a result the side effects of these ICI drugs are very high. The ICI drug developed in 1994 by James P. Allison Ph.D., chair of immunology at MD Anderson Cancer Center in Houston, Texas, was found to produce an increase in average survival of 5.7 months. It was originally called MDX-010, then later renamed an anti-CLA-4 drug (based on the molecule of the T-cell that it targeted), and became commercialised as Yervoy. Various drug companies now market their own version under proprietary names such as Imfinzi, Keytruda, Optivo and Tecentriq.

Ralph Moss, writing in his new book Cancer Incorporated (2020), reports that up to 90% of those treated with the first ICI drug Yervoy and 70% of those treated with more recently developed ICI drugs experienced Immune-related Adverse Events (irAEs). In some trials it reached 96%. These irAEs come in five levels of which 3 and 4 are serious and life-threatening and 5 is death.

Apparently the drug does not have a normal dose-response curve where the effect increases with dose and then starts to fall as dangerous/toxic effects start to outnumber benefits. According to a series of trials, the overall *response* rate rises from 0% at low dose to 6% (medium and high doses) to 12% (very high dose) while the *side effects* increase from 6% to 10% to 17% to 29%; whereas the *disease control rate* changes from 62% to 71%, 41% and 81% while the *overall survival* varies from 6.18 months, 17.05 months 5.16 months and 7.49 months.

In other words overall survival is maximum (at least double) with a medium dose (compared to higher doses) and this also has about half the side effects compared with higher doses. One would wonder why most oncologists only give the highest doses.

According to Ralph Moss it is because the cost is directly related to the dose. The cost is based on how many milligrams in the dose. The cost per milligram is 3,000 times higher than 24 carat gold. The highest dose costs about $147,000 per year compared to ~$5,000 for the lowest dose. This shows how much more there sometimes is in the very high dose that is recommended by the drug companies. Oncologists are also used to giving the 'highest tolerable' dose on the principle of "more is better'. (So the more aware oncologists that advocate the 'lowest effective dose' – in this case the medium dose - can get into trouble, as has happened with chemotherapy in Australian hospitals . Ed)

(continued from page 7)

But new research suggests that lactate is the fuel that keeps cancer cells growing and spreading.

The latest to take on the lactate hypothesis is a research team from the University of Colorado School of Medicine, headed up by Inigo San-Millan. "We discovered that lactate is a catalyst that triggers a mechanism in mutated cells necessary to continue the cancer-forming process," he says.[2]

In experiments he carried out three years ago, San-Millan fed glucose to a line of breast cancer cells, which, as expected, started to produce lactate - and that increased the activity of the mutated cells by up to eight times.

But lactate may not only provide the fuel for cancer growth, it could also be the disease's signaling system. This means therapies that focus only on glycolysis - the metabolism of glucose - may not be effective if they are started too late, once the process has already moved into a later phase where lactate plays the preeminent role.

San-Millan and his team aren't the first to suspect lactate as the driver of cancer. Professor George Brooks at the University of California, Berkeley, first proposed his "lactate shuttle" theory in 1985, and it has been explored by other researchers who suspect lactate is a key

(continued on page 12)

Branches of CISS

NSW

CISS CENTRAL COAST

The Central Coast Branch is in RECESS over December & January. From February to May and October to November the Branch holds a general meeting on the third MONDAY of the month from 7pm - 9:30pm at the Arts & Craft Centre, Henry Kendall Gardens, Bellbird Drive (off Maidens Brush Rd), Wyoming. A Guest Speaker or Sharing of Information and Common Experiences is the agenda. (In Winter months (June-September) meetings are held at 2pm-4:30pm on the third Saturday of the month.)
An excellent library is available to members. ALL WELCOME. Information Mary Sponberg-Macready 02 4322 8767

What's Available from the CISS Office?

CHAMPION Juicer - $575 ($615 non-members)
OSCAR Juicer - $485 **DVD:** CISS 2007 Seminar : Cancer & Hope
Enema Kits: $12.00 $29.50 plus $5 postage
Water Purifier: Reverse Osmosis - $495. Other models avail.

Prices are subject to change. Items can be posted to you. There is a $15.00 postage/ packing fee for standard articles, $16-$18 for country and interstate, $18 Express Post. CISS Handbooks $13.50, $15 including postage.

CANCER SUPPORT GROUPS

NSW

ACTIVE WOMEN TOUCHED BY CANCER & CELEBRATING LIFE

Meets at Balgowlah RSL, Ethel St, Seaforth on 2nd Tuesday of the Month at 7pm. $5 donation. Guest speakers. Contact Robin 9938 6128 or Kate 8902 0196

CANHELP CANCER SUPPORT GROUP

Based on the Ian Gawler approach. Meets 1st & 3rd Tuesday each month from 6.00-8.00pm at Level 3, 280 Pitt St. Enjoy meditation, sharing and support. Ring Sue Saxelby 0408 442 030 or just turn up.

HILLVIEW COMMUNITY SUPPORT GROUP

Meets each Tuesday 1.30-3.30pm at 1334 Pacific Highway Turramurra. Includes a meditation. No charge. Phone 9449 9144 and ask for Patricia Krolik.

NAMBUCCA VALLEY SUPPORT GROUP

Meets every Wednesday, Agnes Grant Centre, Macksville & District Hospital, 11 am – 1 pm. Phone 6568 2677.

NSW (Continued)

NEWCASTLE CANCER SUPPORT GROUP

For information contact Make Today Count, 44 Dudley Road, Charlestown, NSW 2290. Phone 4943 8462.

QUEST FOR LIFE FOUNDATION

Based on 30 years of delivering exceptional retreat experiences for people living with cancer, our 5 day residential retreats deliver the latest research on health, healing and neuroscience. Contact 02 4883 6599 or visit www.questforlife.com.au

SYDNEY ADVENTIST HOSPITAL CANCER SUPPORT CENTRE

Meets each Wednesday 10-12 noon at Jacaranda Lodge, 185 Fox Valley Rd, Wahroonga. . Also special support groups for different cancer types and for carers. Contact Nerolie on 9487 9061.

VICTORIA

CANCER NATURAL THERAPY FOUNDATION

Support group meets on Tuesday nights at 7pm at 531 Elizabeth Dr, Sunbury, Victoria 3429. Meeting includes discussion, relaxation therapy and Reiki Healing. Certified organic produce available these nights. The Foundation operates a resource library, workshops and guest speaker program. Personal Counselling available. Contact Sandra Givca Maqueda (03) 9740 9921; mobile 0411 100 947.

VICTORIA (Continued)

GAWLER FOUNDATION

Learn how to create wellness in the face of cancer at our 5-day and 10-day Cancer Retreats in Victoria's beautiful Yarra Valley. Call 1300 651 211 or visit www.gawler.org to learn more.

WESTERN AUSTRALIA

Solaris Cancer Care (formerly Cancer Support Association of WA)

Cancer Wellness Centre, 80 Railway St Cottesloe WA 6011. Counselling hours: Tues-Thurs. Phone (08) 9384 3544. The CSAWA Inc is a non profit organisation with the primary objective to provide support services, information and self-help activities in a safe and caring environment for people affected by cancer, to enhance their emotional, physical, spiritual and mental well being. Emphasis on self-help and development, teaching life skills that enable individuals to better cope with the fear and uncertainty of a cancer diagnosis. Website: https://solariscancercare.org.au/page/support/support-services

(continued from page 11)

player in various other cancers, including sarcoma[3] and spinal cancer[4]

Exercise cancer away

So how does this change the treatment landscape? Extraordinary as it may sound, San-Millan and his team are devising a series of personalized exercise programs for cancer patients. Although exercise is recognized as a healthy lifestyle choice to help prevent chronic disease, nobody before has suggested it could be used to treat cancer.

If San-Millan's program is anything like the advice handed out after a strenuous workout, it could include hydrating with plenty of water, light stretches and taking magnesium.

He's also researching compounds that can block lactate from leaving the cell. "When lactate is produced, it has to leave the cell through a transporter. We are trying to block the transporter as well as lactate production inside the cancer cell with different compounds."

"If you block the door, the lactate cannot leave, and the cancer cell will burst," he explained.

Dr Cantley's approach is less esoteric: eat less sugar, or, in his case, none at all. "I have a very simple rule. I eat fruit but I don't eat anything that has sugar added to it. And I guarantee everybody would be better off if they ate zero sugar;' he says.[5]

He points to reports from the World Health Organization that the average American consumes 126 grams of sugar a day, which is four times the recommended amount the body needs.

"If I say to someone 'Don't eat anything sweet for two days', they'll look at me like 'That's impossible, nobody can do that.' It's very much like an opioid addiction (an addiction to nicotine."

Cancer rates have been steadily increasing over the past hundred years. Some of this can be laid at the door of environmental factors such as smoking and pollutants, while the most-cited reason is simply that we're living longer and cancer is a disease of old age. But the increase also coincides with the rise of fast-food processing, which uses an abundance of sugars.

This recent surge of interest in his theory came too late for Warburg, who died in 1970. He was convinced to the end that he had discovered the cause of most cancers,

(concluded on page 10)