



The Cancer Chronicles

SERIOUS CONSIDERATION OF ALTERNATIVE IDEAS

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1-888-2-SAVE-DR-B

The federal government is attempting to put Stanislaw R. Burzynski, MD, PhD behind bars for the rest of his life. The basic charge is insurance and mail fraud. But what is really at stake here is the freedom of patients to obtain unusual treatments that originate outside the framework of what has been called the 'medical-industry complex.'

To that extent, a defeat for Burzynski will be a defeat for every cancer patient and every alternative doctor, for the charges against Dr. B. are not very different than those that could be levelled against many unconventional doctors in the country.

The worst that the government can come up with is that Dr. B. allowed his patients to ship their medicines out of the state of Texas. No one is saying Burzynski personally sent antineoplastons out of state. He just "allowed" other allegedly free citizens of a free country to do so.

The government doesn't care if this non-toxic treatment is keeping hundreds of people alive. They don't care if this is an effective treatment for cancer. Burzynski could be a genius or a saint—it doesn't matter. He threatens the status quo in cancer treatment and so he must be put out of business.

What makes this so odd is that at the same time, he is carrying out clinical trials in cooperation with FDA scientists.

Doctors and patients in general are the real target of this persecution. It must be stopped! The future of all alternative medicine—your future—is up for grabs in Houston. (Call 1-888-2-SAVE-DR-B for information on how you can help.) □

SPECIAL ISSUE:

BURZYNSKI TRIAL UNDERWAY



HAD YOUR NONI JUICE TODAY?



HCG HORMONE: SIGN OF CANCER



OUR LAST PRINTED ISSUE



'FREE OUR DOCTOR! DON'T LET US DIE!'

BURZYNSKI GOES ON TRIAL IN HOUSTON FOR "FRAUD"

He is a licensed medical doctor who treats desperate cancer patients, seems to help many of them, and earns their gratitude. Now he faces life in federal prison. Outside the courthouse, in increasing numbers, his patients plead, "Free our doctor. And don't let us die!"

This was the setting as Stanislaw R. Burzynski, MD, PhD, perhaps the best-known cancer specialist in the country, went on trial on Monday, 1/6/97, charged with 75 counts of what the FDA and Justice Department allege is fraud.

The government plays hardball when it comes to alternative cancer treatments: Dr. B., as his patients call him, faces up to five years in prison and a \$250,000 fine on *each* of 34 counts of mail fraud and up to three years in prison and a \$250,000 fine for *each* of 40 counts of violating the food, drug and cosmetic laws.

The final count is for 'contempt' and will be decided not by the jury of eight women and four men, but by judge Simeon T. Lake III.

Simple math shows that the charges carry the equivalent of life imprisonment for the 53-year-old Polish-born scientist. A guilty verdict on even *one* of these counts will spell ruination for the doctor and for nearly 400 patients who believe they are kept alive by his treatments.

DEMONSTRATIONS

The trial scene has been marked by extraordinary efforts by patients on behalf of their doctor. On the first two days of the trial, there were vocal demonstration of over 125 patients and their supporters outside the Courthouse at 515 Rusk Avenue in Houston. This is made necessary by the fact that patient testimony

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on the effectiveness of the treatment has been barred from the trial.

When Burzynski appeared for the first day of the trial, he was surrounded by children whose lives he had apparently prolonged or saved. They and their parents wanted to tell their heart-rending stories. But Judge Lake had agreed with the FDA that the effectiveness of Burzynski's treatment was not to be an issue in this trial: it could not even be alluded to in the courtroom, "irrelevant" to the puny technical charges against him.

TRIAL COVERAGE

Nevertheless, through the media the general public is getting a lesson in the vindictive ways of the US "cancer establishment." A picture of a heroic-looking Dr. Burzynski, holding his five-year-old patient Dustin Kunnari, appeared in full color on the front page of the *Dallas Morning News* on Wednesday, January 8. They stood in front of a sea of posters proclaiming, "Dr. Burzynski saved my life" and "Call Now 1-888-2-SAVE-DR-B."

The opening of the trial was given extensive coverage by many media outlets. Even the *The New York Times* (1/8/97), generally hostile to alternative cancer treatments, covered the story, although they played up the "untested" nature of the drugs. (The *Times's* Gina Kolata had blasted Burzynski in a front-page article in 1996.) The local Texas papers were more sympathetic, with articles entitled, like this one in the *Houston Post*: "Cancer Doctor Says Patients Need Him." A huge picture of Dr. B. with another smiling five-year-old, Taylor Ulbricht Robb, appeared in a *Houston Chronicle* article.

"Rebel cancer doctor to go on trial for fraud," proclaimed the *Chicago Sun-Times*. It called the trial "part of the debate over the US Food and Drug Administration's handling of unconventional therapies for life-threatening illnesses." This was one of the few papers to realize the larger dimensions of the trial.

Earlier, the conservative *Washington Times* (12/5/97) proclaimed "Doctor's lifesaving effort could land him in prison—FDA ignores cancer drug's success." But even the more liberal *Washington Post* carried a long and detailed article, mainly favorable, on the patients' plight.

Patient advocate Greg Bader also managed to place an op-ed piece on the struggle in *USA Today* (2/10/97). The best coverage, in our opinion, was not in the print media, but that of Gabe Pressman, New York City WNBC-TV's veteran reporter, who travelled to Houston to cover the opening of the trial. From our perspective, his reporting on this and related questions has been without peer.

Many other programs have also either filmed or are planning segments on the controversy—so many we can hardly keep track. 'Extra!' aired a segment on 1/23/97. 'Hard Copy,' '48 Hours,' and 'CNN Headline News' are all covering the trial. Whatever the outcome of the trial—and everything is stacked against Burzynski—the publicity is delivering a tremendous blow to the credibility of the cancer establishment. Ironically, the trial coincides with the 25th anniversary of the war on cancer—an expensive effort that has yielded few victories. Burzynski made his discoveries without such support.

AN AD CAMPAIGN

Dr. Burzynski's patient organization has even been running a series of television cable ads in major cities.

"We didn't know what else to do," said Mary Jo Siegel, a 45-year-old mother who has been cancer-free for five years after taking Burzynski's treatment for non-Hodgkin's lymphoma.

Although both 30- and 60-second ads have appeared in Chicago and Washington, the cable provider in New York at first refused to accept the ads, treating them as they do hard-core pornography. They eventually relented and the ads have appeared.

"**The FDA is deciding who can live and who will die and it's just not right,**" said Ms. Siegel. "Clinton and [David] Kessler promised us back in March [1996] they would speed up cancer drug approvals, but all they're speeding up is the [Burzynski] trial."

JURY SELECTED

Jury selection for Burzynski's trial began on January 6, and on the following day prospective jurors were "voir dire" (questioned) by lead Prosecutor Michael Clark as well as defense attorneys Michael Ramsey and Dan Cogdell. By 2 pm, eight women and four men had been chosen. There were two alternate jurors as well (one man, one woman). Overall, the Burzynski side was pleased with the make-up of the panel.

Later that day, both sides made opening statements. Clark told the jury that he would prove that Burzynski treated patients living outside the state of Texas and that he knew they were living outside the state of Texas.

This is the government's most "damning" charge. The problem is that Burzynski does not deny it. Why should he? Both he, his patients, the media, and other courts had always assumed this was perfectly legal. Perhaps because of this, Clark's delivery was considered dull by many in the audience.

"It would put you to sleep," one observer told us. By contrast, defense attorney John Ackerman

(a Wyoming colleague of famed “country lawyer” Jerry Spence) told the jury the incredible story of Burzynski’s life: how Burzynski’s father, a classical scholar, had been jailed by the Nazis in Poland, and how Burzynski himself struggled for an education despite his adamant refusal to join the then-dominant Communist Party. (See *The Cancer Industry*, chapter 14, for a full discussion.)

He told how Burzynski arrived in the US with \$20 in his pocket and landed a research position at the Baylor College of Medicine in Houston. He let them know about Burzynski’s discovery of anti-cancer peptides which he dubbed “antineoplastons.”

Ackerman showed the jury a copy of an attorney’s opinion of the time informing the Houston doctor that it would be legal for him to use his new experimental drugs in the state of Texas. He also read them from a 1987 Federal Circuit Court opinion which agreed that Burzynski’s use of antineoplastons were in fact legal in Texas.

THE STAKEOUT AT MAILBOX, ETC.

On the following day, the government called its first witness, US postal inspector Barbara Ritchey. Ms. Ritchey testified that she had been assigned to investigate Burzynski in 1993 (for alleged “mail fraud”) and had been working on the case full-time since March, 1995.

She related how she had staked out a branch of Mailbox, Etc. near the Burzynski clinic hoping to catch a hapless patient mailing antineoplastons back to his home address. She eventually found just such a patient and testified that she then followed him around for a while.

READING OUT LOUD

Throughout the first two weeks of the trial, the prosecutors repeatedly put up enlarged copies of the informed consent forms that all patients were required to sign. Some showed out-of-state addresses. The point was to impress the jury with the fact that some patients lived outside of Texas, and that Burzynski knew this.

But this approach provided an opening for the team of defense attorneys to have the documents read out loud to the jury. In these forms, Dr. B. clearly informed the patients that his antineoplastons were experimental in nature and had not been approved by the FDA. The forms were explicit that there could be no guarantee that antineoplastons would reduce or stabilize their cancers.

Attorney Ramsey astutely pointed out that one crucial element of “fraud” is deceit. Without deceit, there can be no fraud, he said. **“Isn’t that Informed Consent form the absolute, honest golden truth?”** he then asked the Postal Inspector. She had to admit that it was, thereby undermining the government’s main contention.

What’s With Prosecutor Mike Clark?

Prosecutor Mike Clark seems to be unsure of the righteousness of his own cause. In a pre-trial motion, he virtually admitted that Burzynski’s treatment *works*. When Dr. B’s attorneys asked that jurors be allowed to tour the impressive Burzynski Research Institute (BRI), Clark called the request **“a thinly veiled effort to expose the jury to the specter of Dr. Burzynski in his act of saving lives.”** “The specter... of saving lives!” Certainly an amazing choice of words, whose significance was not lost on reporters from the *Washington Times*. This was reported in a front-page story, December 5, 1996, entitled “Doctor’s lifesaving effort could land him in prison.” (The article justly commented: **“The prosecution marks the first time the FDA has tried to jail a scientist for using a drug on which he is conducting FDA-authorized clinical trials.”**)

Clark is also quoted in the *New York Times* as saying to the jury, **“I submit this case is not about Dr. Burzynski’s character because I realize good men do bad things.”**

“A good man”? One wonders if this is what Clark told the Grand Jury last year, because their indictment paints Dr. Burzynski as nothing less than a money-hungry monster, a picture totally unrecognizable to the majority of his patients and to others who know him. □

Ramsey also had Ms. Ritchey read from a 1987 Fifth Circuit decision which stated that Burzynski could continue to prescribe antineoplastons in the state of Texas. The decision also stated that Judge Gabrielle McDonald retained the authority to amend or modify her order.

“In other words,” boomed the Texas lawyer, “the FDA had another remedy, didn’t it? If it felt Dr. Burzynski was violating the order by treating out-of-state patients, it could have simply sought clarification, couldn’t it have? Then we wouldn’t all have to sit here for four or five or six weeks of this trial.”

Here too, Ritchey had to agreed.

On January 9, Mr. Ramsey continued his cross examination of Ms. Ritchey. She admitted what had previously been suspected, that she and six other federal agents had known that Burzynski would be out-of-town when they raided his clinic on March 24, 1995.

In a dramatic moment, she admitted that the Informed Consent form was truthful, but took issue with the sentence, “Dr. Burzynski may continue to *prescribe* antineoplastons in Texas.” She contended that the legal decision’s actual language read “Dr. Burzynski may continue to *treat patients* with antineoplastons in Texas.”

“Isn’t that the same thing?” asked Ramsey.

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“No,” said Ritchey. “Sometimes, I go to the doctor and he treats me but he doesn’t prescribe.” Observers seemed non-plussed by this hair-splitting response.

QUESTIONING MS. TOMASZEWSKI

The next witness called by the government was Barbara Tomaszewski, Dr. B’s long-time office manager. She was called to identify records, but in response to a question managed to get in that “Dr. Burzynski is very honest, a ‘workaholic,’ and his only pleasure is when patients are getting better.”

The final witness of that day was Ms. Peggy Oakes, an employee of the CNA Insurance company. Many have long suspected that the insurance industry was involved in the indictment, not wanting to pay for expensive new cancer treatments. Although insurance companies were allegedly “defrauded” by Burzynski, this witness admitted under questioning that her company knew all along that Burzynski’s treatment was experimental. (If a company is on notice that a treatment is experimental there can be no finding of fraud, say Dr. B’s attorneys.)

On Wednesday, January 15, the mother of an ex-patient, David Burluson, was called by the government and testified that Burzynski knew David lived out of state and that he would take the medicines out of state. (Again, something Burzynski hardly denies.)

But this experienced head nurse also told the jury that the training her son had received at the clinic in the use of the catheter and pump delivery system was excellent. She related that her son was very intelligent, had researched his options thoroughly, and had spoken to 11 other Burzynski patients before opting for this treatment. He was fully informed when he made his decision.

Ray Goulet, husband of another ex-patient, then testified that he and his wife came from New Hampshire for the treatment, after she was given 30 days to live.

“New Hampshire — don’t your license plates say ‘Live Free or Die?’” asked defense attorney Mike Ramsey. The point was clear.

Repeatedly, the defense team turned the tables on the prosecutor. Over and over, they used the introduction of the Informed Consent statements to show that the clinics had in fact taken pains to inform patients that this treatment was experimental in nature.

A “GLORIOUS TRIUMPH”?

On Thursday, 1/16/97, Barbara Murphy, who owns a Bed & Breakfast near the clinic, was called by the government to testify. She admitted that she picked up a pack-

age at the clinic for a few patients and mailed it to their homes. (Apparently this is the government’s idea of ‘introducing a drug into interstate commerce.’)

Prosecutors acted as if they had scored a glorious triumph. However, during cross, Attorney Ackerman brought out that Ms. Murphy had a personal motive to help these patients: not only had she received hospice training but she was “working through” her grief at her own sister’s death from breast cancer.

She testified to the “excellent care, warm attention and hugs patients received at the clinic — quite unlike the care her sister had received at a hospital in Chicago.” Patients, she said, could call the clinic any time of day or night and get a five-minute callback. She recalled that she mailed these small packages at the request of a patient, but never at the request of the clinic; she did this for perhaps 3 or 4 out of the approximately 100 Burzynski patients who stayed with her.

PHENOMENON

The next witness was another insurance company employee, who testified that the code used by the Burzynski Research Institute on a claim form was not a perfect fit. Under cross by attorney Richard Jaffe, she admitted that such codes do *not* have to be exact fits, and *she did not know a better code than the one they used.*

Jaffe then tried to read a sentence from one of the Institute’s letters to the insurance company, but prosecutors jumped to their feet and argued that this would be prejudicial, violating the judge’s ruling that the effectiveness of the treatment was not at issue in this case. This time, Judge Lake overruled the prosecution’s objections, pointing out that the prosecutors themselves had quoted extensively from the letter during direct.

The jury seemed riveted as Jaffe read, “Anti-neoplastons have shown remarkable effectiveness in treating certain incurable tumors such as brain tumors.” The jury suddenly knew not only that the treatment might actually work, but that prosecutors were trying to hide this fact from them. It was a dramatic moment.

At the end of the day, Judge Lake commented that he sent his son to rent a movie the previous night so that their family could get a break from talking about the issues raised in the Burzynski case. And what did his son come home with? he asked, rhetorically. “Phenomenon” — a movie starring John Travolta as a man who is diagnosed with an astrocytoma brain tumor!

It is mainly the FDA that instigated this whole trial. And so, on Monday, 1/20/97 Paul Zimmerman of the FDA testified that patients listed in the indictment were not part of a clinical trial.

Prosecutor Clark seemed certain that he had delivered a telling blow to the defense. But undercutting his own message, he then played a tape of Dean Mouscher clearly telling the FDA that a particular patient was being treated. but *not* in the context of a clinical trial.

Zimmerman also admitted that aspirin would never make it through today's FDA approval process.

This current FDA official read from a former FDA agent's letter to a Congressman stating that "Dr. Burzynski may manufacture and sell antineoplastons in Texas, where the FDA lacks jurisdiction."

Also interrogated was Bob Moseray, a native of Sierra Leone, who has been a clinic employee since 1988. Bob admitted that on a few occasions, when patients were too sick to come to Houston, he helped send them medicine.

"Why would you do that if you knew it was against the law?" asked prosecutor George Tallichet.

"Well, if you could see these people—sick and in need of help. It is my moral obligation to help the sick and the suffering," replied the BRI employee.

"You encouraged patients to make friends in Houston to send them medicine, didn't you?" Tallichet yelled. "No," said Bob, "I simply told them that if they had a friend in Houston, he could pick up the medicine for them."

"Aha!" shouted Tallichet triumphantly, "so you did encourage them to make friends in Houston!"

Bob also testified that when he helped patients send medicine, this had nothing to do with Burzynski. At that, Tallichet seemed to smell blood.

"You used a company van, didn't you," he asked.

"No, I used my own car," Bob answered, calmly.

"Well you did it on company time, didn't you?"

"No" replied Bob, "I did it on my lunch hour."

GOLDEN RULE

On Wednesday, 1/22/97, there were yet more witnesses from the insurance industry. An employee of the Golden Rule Insurance Company testified that Burzynski's clinic had billed her company for infusion services. On cross, Ackerman presented evidence that 'Golden Rule' is well-known throughout the industry as a nit-picking company, which does everything it can to deny claims.

He showed her a record of a phone conversation in which a patient pleaded for them to cover the costs of his antineoplaston treatment. The employee tells the patient that if he sent in his medical records showing benefit, the company might agree to pay.

"So in fact your company can review the results of an experimental treatment and make an exception if it sees fit?" Ackerman asked.

"No, I don't think that's true," said the employee.

"So did you call Mr. Newman and tell him he had been misinformed," Ackerman probed, "that in fact Golden Rule would not review his medical records?"

Witness: "Well, we will review any information we receive."

Ackerman: "You just said that your company does not make exceptions to its exclusion of experimental treatments."

Witness: "That's correct."

Ackerman: "So in other words that was just a charade? Is it your company's policy to lead your customers on and pretend that you may make an exception for them, when you know it will not?"

Witness: "Well, there's no such formal policy."

Ackerman: "Do you know what the Golden Rule is?"

Witness: "Yes. Do unto others as you would have others do unto you."

Ackerman: "That's right. No further questions."

A SERVICE INDUSTRY

Another prosecutor, Amy LeCocq, asked the witness **A**during re-direct if insurance was not a "service industry." That gave the defense an opportunity to point out that the more claims the company *denies* the richer it becomes; Golden Rule had "serviced" its clients in such a manner that its own assets had grown to over \$1 billion.

Michael Pugliese testified that his family was told by the country's finest hospitals that no conventional treatment could stop his father's glioblastoma multiforme brain tumor. They finally went to BRI for treatment.

The jury was then asked to leave, during which time Mr. Pugliese testified that two federal agents, a postal inspector and an FDA agent, came to the family's home and tried to convince them to "not waste the father's time" on Dr. Burzynski's treatment. They said that they had been "trying to get" Dr. Burzynski for the past ten years. The defense argued strenuously that the jury should be told about this, to show the animus, grudge and bias some agencies had against Burzynski.

But Judge Lake ruled that the jury could not hear these devastating details. □

(Details on the outcome of the trial will be found at our Website: <http://www.ralphmoss.com> just as soon as they are known. —RWM)

RIGHT-HEART CATHETER MAY CAUSE PATIENT DEATHS

We don't often discuss medical issues other than those relating to cancer treatment, but we just couldn't resist this story.—Ed.

An article in the September 18, 1996 issue of the *Journal of the American Medical Association* (JAMA) has raised serious questions about the use of right-heart catheterization in patients with heart disease. This is of interest not only to those struggling with heart conditions, but to all those who wonder how important treatment decisions are made by “scientific medicine” in the USA.

Every year, thousands of seriously ill patients are subjected to this invasive procedure, which involves inserting a plastic catheter tube into a vein in the neck or in the groin. The doctor must then slowly thread this tube through the bloodstream. A tiny balloon at the tip is inflated to transport the device into the pulmonary artery. Once there, the catheter device relays information about blood pressure, blood flow, and oxygen concentrations to the doctors. Its overall purpose is to tell whether the heart is pumping effectively.

Most cardiologists swear by the value of this procedure, so basic to their art that it is now performed over one million times per year in the United States alone.

Few people are aware that the right-heart catheter has never actually been proven safe and effective. But its use was established in medicine before receiving rigorous scrutiny from the FDA or anyone else.

Is this “scientific?” You might think that vocal advocates of “scientific medicine” would leap at a chance to prove that this pervasive technique is both safe and effective. Oddly, this has never happened.

“There is no proof that the right-heart catheter offers patients any clear advantage,” wrote *Science News*, in a comprehensive review of the controversy (12/14/96).

For years, in fact, there have been rumors of possible dangers from the procedure. Because of such concerns, Alfred F. Connors Jr., a critical-care specialist at the University of Virginia School of Medicine in Charlottesville, sought to conduct a definitive study.

Naturally, he wanted to perform a randomized trial, the kind that most scientists agree is likely to yield the most convincing results. However, he found that all the US doctors he contacted simply refused to participate in such a trial. They objected that participating in such a study would require them to withhold this test from half their patients—and they were simply unwilling to do so. And so Connors was forced to conduct a somewhat less rigorous study. The one he finally did carry out involved

collecting data on 5,735 people, half of whom had been subjected to right-heart catheters, half of whom had not.

But Dr. Connors and his colleagues arrived at a frightening conclusion: patients who received right-heart catheterization ran a *21 percent greater risk* of dying within the following 30 days than people whose treatment did *not* include use of the catheter. Astonished by these counter-intuitive results, they ran an even more rigorous analysis. But this second test confirmed that there was an even-greater, *24 percent* chance of dying.

Projecting this onto the national scale, he concluded that “the right-heart catheter may play a role in the deaths of 23,000 people in the United States” each year.

The study was published in *JAMA* where an accompanying editorial in this conservative journal stated, “**We believe that it is imperative to determine if catheterization benefits or harms critically ill patients.**”

What was the result? Consternation. The American Heart Association (AHA) council on clinical cardiology immediately condemned the study as “flawed.” Why flawed? Because it wasn't a controlled trial. But remember that it was the cardiologists themselves who had blocked a controlled trial by refusing to cooperate in one!

JAMA also called on the National Heart, Lung, and Blood Institute (NHLBI) of the NIH to fund a randomized, controlled trial of the right-heart catheter. But while NHLBI director Claude Lenfant, MD agreed *in theory* that such a trial was important, he explained that his agency refused to pay for it. Instead, as he told the popular magazine *Science News*, “the organizations representing critical-care doctors should undertake such a study.” This sounds like a runaround.

LOSING LIVES?

It may seem odd that a very common medical procedure, almost universally believed to save lives, could somehow be taking such lives by the tens of thousands.

There are several possible explanations for this anomaly. First, there is the possibility of bacterial infection. A previous study had shown that of 1,000 people catheterized, 60 developed infections and 18 died.

Catheterization may also be a “marker for a more aggressive style of practicing medicine,” says *Science News*. Perhaps it is not the catheter itself that is dangerous, but some of the attitudes and practices of the person pushing it. Gung-ho doctors “may submit their patients to other invasive, and risky procedures.” (*ibid.*) So perhaps it is more than just a little plastic tube that needs re-examination, but an aggressive style of doctoring that has reached the limits of its usefulness.

And why all the defensiveness on the part of the cardi-

ologists? Well, nobody likes to be proven wrong. (Crow is not a tasty dish.) The cardiologists as a whole rely on this procedure. What if it turns out to do more harm than good? It would be a blow to their whole specialty.

Second, catheterization is big business. More than one million catheter kits, worth \$2 billion, are sold every year in the US. The procedure also pumps up the bottom line of many hospitals. The average cost of a hospital stay was \$35,700 for those heart patients who did not have catheterization, but this jumped to \$49,300 for otherwise comparable patients who had it performed on them.

At one million procedures per year, that looks like an excess cost to the consumer (and insurers) of about \$15 billion per year. Isn't it enough to break your heart? □

PROGRESS NOTED FOR ALTERNATIVE MEDICINE

Alternative medicine continues to make striking progress around the world. For example, the south Indian state of Kerala is setting the pace for a new national policy by bringing Ayurveda, the ancient system of healing, into a "barefoot doctor" system to aid the ailing public health system.

Acknowledging that India's public health system has failed, former health minister A.R. Antulay announced a policy to harness the services of India's 550,000 registered Ayurvedic practitioners.

In Kerala, for thousands of years Ayurveda has maintained a tradition of vaidyans (master physicians) who train students, who then treat patients in sylvan retreats called "ashrams." For example, it is said that at the Santhigiri Ashram, patients suffering from diseases considered chronic by allopathic doctors are routinely "cured" by Ayurvedic physicians, under the supervision of their 70-year-old Guru.

Such gurus look for the underlying spiritual causes for such "physical" diseases such as rheumatism, diabetes, epilepsy and heart conditions. They "may prescribe psychic treatments which would seem irrational in allopathy." Cures are also allegedly brought about by a wide range of herbal palliatives, oil massages, fomentations and steam baths, all delivered at a nominal cost to the patient or the state. □

'WHO' ACCEPTS ALTERNATIVES

In late 1996, the World Health Organization (WHO) accepted the US Office of Alternative Medicine (OAM) as a collaborating institution in traditional medicine. Following that, at a meeting in Geneva on 1/22/97 the Executive Board of WHO has entered into official relations

with the World Federation of Chiropractic (WFC) as a non-governmental organization. It is an extraordinary breakthrough for the international movement towards a broader definition of health care.

The WFC, an organization which represents national associations of chiropractors in 62 countries around the world, now joins 160 other private sector organizations in WHO's network of NGOs. According to the Independent News Service, this "**is one more sign of the increasing role and acceptance of chiropractors and other alternative or complementary health care providers.**"

"In our work with WHO," said WFC President Dr. John Sweaney of Australia, "there has been a primary focus in improving the prevention and management of low-back pain, the most common cause of disability and suffering in work-age adults and an area in which the value of chiropractic manipulation or adjustment is now well accepted scientifically by the medical profession."

This year, in fact, WHO will publish a textbook on "Chiropractic Methods in the Prevention and Management of Neuromusculoskeletal Disorders in Occupational Health." This results from the collaboration between the WHO and the WFC.

Acceptance of the WFC was strongly supported by a number of large non-governmental organizations such as the World Federation of Public Health Associations, which cited the valuable work of chiropractors in public health associations, and the International Council of Nurses, which spoke of the collaboration and respect between the nursing and chiropractic professions. □

NEJM ENDORSES USE OF 'HERB'

The *New England Journal of Medicine* has never been friendly towards herbal medicine. But it thinks highly of one particular herb, which most often gets rolled into funny cigarettes. An editorial (1/31/97) excoriates the government regarding the medical use of marijuana.

"Thousands of patients with cancer, AIDS, and other diseases report they have obtained striking relief from these devastating symptoms by smoking marijuana. The alleviation of distress can be so striking," they report, "that some patients and their families have been willing to risk a jail term to obtain or grow the marijuana." It mocks HHS Sec. Shalala for giving an "organ recital" of body parts that could be harmed by marijuana. The journal's editorialist calls US government policy "misguided, heavy-handed, and inhumane." Next thing, they'll endorse Essiac tea! Bravo to the *NEJM* for its belated entry into the field of "herbal" medicine. □

MELATONIN AND BREAST CANCER

Many people with cancer are taking supplements of the pineal gland extract, melatonin. Are such patients—and especially women who have estrogen-receptor positive breast cancers, helped or harmed by taking this?

The whole subject is a relatively new one, and there is not a whole lot of data for us to rely on. Some of it comes from cell culture or epidemiological studies.

What does the record-to-date show about the relationship of melatonin to breast cancer?

About two-thirds of breast tumors are “estrogen-dependent,” *i.e.*, the female hormone estrogen accelerates the growth of such tumor cells. The exact way in which this happens is not known, but many such breast cancer cells have receptor sites, to which female sex hormone molecules attempt to bind.

When a female sex hormone molecule docks on the outside of such a cancer cell it may send a signal to that cell's DNA, telling it to divide. That is why *anti*-estrogens, such as the widely used drug tamoxifen, can slow the growth of hormone-dependent breast cancer cells.

But the presence of estrogen also seems to stimulate the production of another hormone, melatonin. Thus, melatonin may be the body's natural “answer” to excess estrogen. If so, then ingesting extra melatonin may counteract the undesirable effects of estrogen.

It has also been shown in the *Lancet* that there is a statistical correlation between a common malfunction of the pineal gland (“pineal calcification”) and the incidence of breast cancer. These facts suggest a possibility that the less melatonin there is in a woman's blood, the greater her chances of breast cancer.

It is also interesting to note that:

- younger women, who have higher amounts of melatonin in their blood, have lower rates of breast cancer than older women;
- women who menstruate early in life have lower levels of melatonin and higher rates of breast cancer;
- psychiatric patients who take the drug Thorazine have lower rates of breast cancer. One of the things that Thorazine does is to raise blood levels of melatonin.
- Obese women, who have higher rates of breast cancer, also tend to have lower rates of melatonin.
- Blind women, who typically have higher rates of melatonin, have lower rates of breast cancer.

CELL LINE RESEARCH

Adding melatonin to a cell line of cancer cells growing in a test tube (a strain called MCF-7) inhibited those cells by 78 percent. Melatonin also inhibited the growth of

breast tumors in laboratory animals, either preventing the onset of a cancer or significantly slowing its growth.

Melatonin also blocked cell division in cancer cells. It interfered with “spindle formation,” which happens to be the mechanism of action of the highly touted drug taxol.

It thus may be useful alongside this very toxic drug.

DANGER?

In their 1995 best-selling book, *The Melatonin Miracle*, Drs. W. Pierpaoli and W. Regelson, MD frightened some readers when they pointed out that “melatonin can increase the number of estrogen receptors on human breast cancer cells” (p. 120).

This sounds frightening, especially if you think that the more receptors a cell has, the greater its chances of accelerated cell growth.

However, the authors also point out that while an increase in the number of estrogen receptors on breast cancer cells seemingly would promote the growth of such cells, paradoxically—and for reasons unknown—“*in melatonin's case it doesn't*” (emphasis added).

It has also been shown that melatonin is a highly potent scavenger of harmful free radicals. It may protect DNA from the kind of damage that can add up to cancer.

TAMOXIFEN AND MELATONIN

In postmenopausal women, tamoxifen does indeed appear to extend lives. But over time, its beneficial effects may wear off. The same Drs. Pierpaoli and Regelson speculate that “it may be possible to give melatonin to women who do not have estrogen-sensitive cancers to induce the growth of estrogen receptors so that these women can also respond to tamoxifen.”

It's a daring suggestion.

While not proven, “given the epidemic of breast cancer in the West,” they say, “these ideas warrant further investigation.”

In Italy, there have been a number of studies showing that people with advanced cancer may experience remissions (albeit mostly partial and/or temporary) after ingesting fairly high doses of melatonin. They also received relatively low dose injections of the well-known recombinant cytokine, interleukin-2 (IL-2).

Given the low cost and low toxicity of such a treatment, this Italian series of experiments deserves intensive examination. □

Erratum

In our Sept. 1996 issue on Coley's Toxins, we stated that Mrs. Helen Coley Nauts is in her 90s. The truth is that she is in her 80s and still wonderfully productive. We apologize for the error.

LINK BETWEEN TROPHOBLASTS AND CANCER CORROBORATED

An article in the orthodox journal, *Cancer*, has established that a natural hormone called human chorionic gonadotropin, or "hCG," is an accurate marker for the presence of cancer. This finding could have profound implications for understanding the cause of cancer, as well as suggesting how to detect and prevent it.

The association between hCG and cancer has been suggested in unconventional research circles for decades, but this is the strongest suggestion to date found in the standard medical literature.

HCG formed the basis of the H.H. Beard "Anthrone" test and the Novarro diagnostic test for cancer. Both of these were roundly condemned by the American Cancer Society which, ironically, is the publisher of *Cancer*.

For decades the link between this particular hormone and cancer was championed by Ernst T. Krebs, Jr., the co-discoverer of laetrile, who passed away in late 1996.

Given its "disreputable" past, it was somewhat startling to find ideas about the role of hCG given such vigorous support in *Cancer*.

The finding that hCG is present in most cancers raises again the age-old question, "Where does cancer actually come from?" The first great theory of cancer's origin was proposed by Julius Cohnheim (1839-1884) and was called the theory of embryonal rests. Cohnheim was a great cancer scientist, and the first to scientifically classify tumors the way we still do today (i.e., carcinomas, fibroma, sarcoma, etc.).

Cohnheim thought he had discovered the core of the problem of the origin of cancer in embryonal factors. In the course of development of an embryo, he said, more cells than are produced than are necessary for the formation of any given part. This left an excess of germ cells behind. In cancer's development, he said, the principal fact is this excess material.

In 1902, a Scottish professor of embryology named John Beard published a variant on this interesting theory. He called this the trophoblastic theory of cancer's origins. It was not so much refuted as ignored by the medical establishment. Over time, the focus of research shifted to the study of the individual cell, and especially its genes.

Beard's 1911 book, *The Enzyme Treatment of Cancer*, received little attention and most scientists have never heard of it. But the theory did not disappear, but went underground. It has formed the basis of an enormous number of alternative explanations and treatments.

In 1946, Dr. C. Oberling predicted:

"Someday perhaps it will turn out to be one of the ironies of nature that cancer, responsible for so many deaths, should be so indissolubly connected with life."

Well, "someday" is here. Never has the link between the process of birth and of death been more closely linked.

GLYCOPROTEINS

Human chorionic gonadotropin (hCG) is defined as a negative charged glycoprotein hormone (a "sialoglycoprotein") that is produced by the trophoblastic cells of the human placenta as well as by certain cancer cells.

This hormone is well known in conventional clinical medicine as the basis of the urinary diagnostic test for pregnancy. Every time a worried teenager buys a pregnancy kit at Rite Aid she is engaged in a search for hCG.

In 1994, Dr. A. Krichevsky and colleagues showed that cancer cells express hCG in all its forms, including the related human luteinizing hormone (*Endocrinology* 1994;135:1034-1039).

Then in mid-1995 Dr. Hernan F. Acevedo, PhD and his colleagues at the Allegheny-Singer Research Institute in Pittsburgh published a landmark article on the topic in the ultra-orthodox journal *Cancer* (1995;76:1467-1475).

Acevedo is well-known for his prior work confirming some of the assertions of Virginia Livingston-Wheeler, another doctor whose treatment was enriched by the Beardian thesis. Using conventional and accepted methods, this time Acevedo rigorously showed that the "synthesis and expression of hCG...is a common biochemical denominator of cancer."

This finding provided the scientific basis, he explained, "for studies of prevention and/or control by active and/or passive immunization against" hCG and related compounds. In other words, if hCG is always present in cancer, you can then 'turn your guns' on it as a target in therapy.

Ask a conventional oncologist and she will tell you that hCG is known to be the defining marker in choriocarcinoma and some other rare tumors, but is not found with any consistency in more common cancers. This is the crux of the controversy.

By using more sophisticated techniques, such as quantitative analytical flow cytometry, Dr. Acevedo has now seemingly demonstrated the presence of hCG, its subunits, and/or fragments in cells from 85 different cancer cell lines (*Cancer* 1992;69:1818-1828; *Cancer* 1992;69:1829-1842; and *Cancer Detect Prevent* 1995;19:37).

He also found hCG in cells isolated from human malignant tumor tissues (*Proc Am Ass Cancer Res* 1994;34:27).

Acevedo's summary is that "hCG, the hormone of pregnancy and development that also has chemical and physiological properties of growth factors, is a common phenotypic characteristic of cancer."

A clinical trial has in fact begun using a vaccine directed against hCG. It utilizes a combination of a synthetic form of

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hCG bound to diphtheria toxoid. A similar product was used in another clinical trial and “proved an almost incredible degree of efficacy and safety.” This new product was originally developed for fertility control by the World Health Organization. Phase I trials of this vaccine have now been completed (Triozi, PL, et al. *Int J Onc* 1994;5:1447-1453) and Phase II trials are underway.

UNIVERSALITY

What is amazing in all this is the near universality of the hormone in cases of cancer. The activation of a particular gene and gene cluster “always occur,” says Acevedo.

Through the presence of hCG, cancer cells are able to independently regulate their own growth. Acevedo confirms that hCG makes a tumor “invisible” to the immune system, which is loathe to attack anything in the body that looks like a developing fetus. “These characteristics make cancer cells immunologically inert.”

Dr. Acevedo summarizes: “cancer is development and differentiation gone awry.

“After 93 years,” Acevedo continues, “Beard has been proven to be conceptually correct....”

Needless to say, this is a statement few of us ever expected to see in a publication of the ACS!

And, we read, it was Dr. Beard’s observations that “gave rise to the trophoblastic theory of cancer.” Here is certainly one of the most amazing turnarounds in the history of medicine—how a theory can lay dormant (like an embryonal rest) for almost a century before being finally accepted by at least part of the scientific establishment.

REGELSON SUPPORTS WORK

William Regelson, MD, whom we quoted elsewhere as co-author of the popular book, *The Melatonin Miracle*, has become a vocal supporter of Dr. Acevedo’s work as well.

Dr. Regelson is a member of the Department of Medicine of the Medical College of Virginia. In an accompanying editorial in *Cancer*, Regelson points out that not only is hCG found in most cancers studied, but “**its expression in cancer defines the metastatic aggressiveness of the tumors in which it is found.**”

He repeats that it “**defines malignancy,**” again, an astonishing statement to see in an “orthodox” journal.

Normal (non-embryonic) cells do not express hCG. Nor do benign tumor cells. Instead, “hCG-beta becomes a **defining phenotypic expression of malignant transformation,**” i.e. **it defines cancer.** If you find hCG present, and the patient is not pregnant, she probably has cancer. The more hCG, in fact, the more serious the case.

In the past, studies have shown hCG is present in between 14 to 79 percent of cancers studied, including

breast, bladder, GI, ovarian, lung and melanoma.

These new-old findings on hCG open up prospects for treating cancer as well. They lend support to a number of unconventional treatments across the spectrum.

To the scientists involved we say: It’s a good idea to quickly exploit this key characteristic of cancer. But it is equally important is to understand the history of trophoblastic-type theories of cancer. Go back and seriously study the works of Cohnheim, Beard, Gurchot, H.H. Beard, Kelley and Ernst T. Krebs, Jr. They held onto an essential truth, when more established scientists abandoned it.

Dr. Krebs especially deserves more credit than he has ever received. Remember that he founded the John Beard Memorial Foundation to keep this idea alive at a time when very few believed in it. We now realize that an essential key to the cancer puzzle was explained—and then systematically ignored—almost 100 years ago. □

NEW EVIDENCE SUPPORTS THEORY OF CO-INFECTION IN MTH-68 USE

We have written in *Cancer Therapy* about MTH-68, a treatment that involves deliberately infecting patients with the virus that causes Newcastle Disease of poultry.

Many questions remain about why an infection with one virus sometimes “cures” those suffering from other infections or diseases.

A recent article gives some clues to this old puzzle. The article is entitled, “To kill or cure: options in host defense against viral infection,” and appeared in *Current Opinion in Immunology* last year (1996;8:476-483). The authors are Drs. Luca G. Guidotti and Francis V. Chisari of the Scripps Research Institute in La Jolla, CA. They discuss the complex interrelationship in the liver between the viruses that cause the three main types of hepatitis.

The Scripps scientists write that sometimes when a person’s liver is infected with the very dangerous hepatitis B virus [HBV], they are unexpectedly cured if they simultaneously contract another liver infection.

A “co-infection or superinfection of the HBV-infected liver by other pathogens could facilitate HBV clearance,” they write. It’s an astonishing idea. But the concurrent viruses may stimulate the production of cytokines such as interferon and tumor necrosis factors.

They note that “cytokine-activated pathways may be operative in other viral infections.”

This startling observation is consistent with case histories showing that chronic “hep B” infections sometimes go into remission when the patient comes down with an additional infection with either hepatitis A or C.

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NONI: A PRELIMINARY REPORT

What is noni juice and why are so many people taking it?

Noni is Hawaiian for a plant known scientifically as *Morinda citrifolia*. It is also known as Indian mulberry and is virtually ubiquitous in tropical climes.

Noni grows as a small evergreen tree at elevations of up to 1,300 feet. It has large oblong leaves, white flowers, and a very distinctive grenade-shaped fruit.

This fruit turns a characteristic yellow upon ripening. Noni has been used extensively in both Polynesian and Hawaiian folk medicine as a general health tonic, and especially for diabetes, heart disease and high blood pressure. It is also rubbed on wounds, cuts and abrasions of all sorts. One Maori has written that traditional Polynesians use noni for just about every illness.

"Noni is part of our lives," he said. Noni is also said to have been used as a traditional remedy for malignancies by Polynesians (*Proc Annu Meet Am Assoc Cancer Res*; 33:A3078 1992).

Since the 1980s some scientists and native healers in Hawaii have been experimenting with the properties and uses of this plant. There are even a number of books on this topic, such as those by W. Arthur Whistler.

CRAZY ABOUT THAT PLANT

Noni has now developed into something of a craze. In 1992, Isabella Abbott, the G.P. Wilder Professor of Botany at the University of Hawaii, reported that in her state "people are crazy about this plant. They use it for diabetes, high blood pressure, cancer," as well as many other illnesses (*Sunday Star-Bulletin & Advertiser*, 2/9/92). She herself reported getting ten phone calls a week on the topic.

The main obstacle to marketing noni as a food supplement was esthetic. Again, according to Prof. Abbott: "It smells like something the dog dragged in." The Maori writer says "the traditional juice stinks and tastes terribly bitter — it's almost unbearable."

According to another scientist, "If one is dying and all other remedies have failed, then and only then will the average person drink noni juice. The flavor of juice made from ripe Hawaiian noni is terrible. None of my colleagues would touch the untreated juice...."

So here was a marketing challenge. But a Utah company called Morinda, Inc. has now mixed noni with water, blueberry and grape juice concentrate and the stuff is now selling briskly. Most alternative clinicians and many cancer patients have heard about it, and many are on the juice, with or without an attendant diet. So, the question naturally arises, is there anything to it?

SCIENTIFIC EVIDENCE?

There is a small amount of experimental evidence to support the use of noni juice against cancer. *Morinda citrifolia* appears to contain some interesting compounds, not just the usual nutrients but exotic compounds such as damnacanthol (*Cancer Lett*, 73: 2-3, 1993 Sep 30, 161-6). In 1993, scientists at the University of Metz found that a freeze-dried extract of noni roots had a "significant, dose-related, central analgesic activity..." one of its traditional uses. The French scientists concluded that "these results are suggestive of sedative properties."

This could be important in cancer, certainly. However, these experiments were conducted with roots, and nobody is selling noni roots. Only the fruit.

MAIN EXPERIMENT

If you surf the Net, you will find numerous claims of noni's "proven" anticancer activity in the laboratory. But this is based on a single set of studies. Most of these were carried out by Dr. Annie Hirazumi and colleagues at the Department of Pharmacology, John A. Burns School of Medicine, University of Hawaii, Honolulu.

She administered pure noni juice to a pet dog when it was dying. The dog recovered miraculously, and she set out to find out more about this fruit.

In 1992, her group reported at an AACR cancer research meeting that when they injected a relatively large amount (750 mg/kg solid) of noni juice into animals with cancer, every other day, the mean survival time was 33.5 days. This was compared to 14.8 days in the controls.

While there were no survivors out of 23 control mice, 9 out of 22 of the treated animals were still alive at the end of the experiment.

They also reported that the juice was not toxic to cancer cells or to many strains of normal cells, even at high concentration (*Proc Annu Meet Am Assoc Cancer Res*; 33:A3078 1992). This was promising.

At a Federation meeting in 1995 [FASEB 9(3):A93; 1995], they reported in more detail on the use of noni against transplanted tumors. An alcohol precipitation of the fruit juice was shown to give protection against cancer when it was injected into the peritoneal cavity of the mice. Thirty-four C57BL/6 mice were first implanted with Lewis lung carcinoma cells. Treated mice were given a total of five injections. Again, the mean survival was 32.7 days compared to 14.7 days in the controls.

Concurrent treatment with immunosuppressive drugs destroyed the anticancer effects of noni, "suggesting the antitumor activity acts via activation of host immune system," they wrote.

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They reported that noni demonstrated a protective effect against an experimental leukemia caused by the inoculation of tumor-causing viruses. It prevented the enlargement of the spleen by 51 percent.

Again, they concluded that noni juice "...seems to act indirectly by enhancing host immune system involving macrophages and/or lymphocytes" (*The Proceedings of the Western Pharmacological Society* (1994;37:145-146).

This is encouraging, even exciting. But several

STRANGE FRUIT?

Noni juice appears to be non-toxic. All of the animal and cell-line experiments I have seen so far have found no evidence of toxicity. The company has repeatedly assured me that noni is on the FDA's Generally Regarded as Safe (GRAS) list. They also assure me that noni was listed as an acceptable food for US troops in the Pacific during World War Two. I haven't seen either list, but am ready to believe that they do in fact exist.

However, I think some caution and common sense is in order. Just the fact that noni has been consumed in Polynesia for various medical emergencies cannot be considered *de facto* proof that it is without any potential harm, especially for long-term use.

Everyone knows that some traditional herbs have proven quite dangerous upon closer inspection.

The main distributor is to be commended for having Corning Hazelton Laboratories run tests for gamma isotope radiation, heavy metals, pesticide residues, yeasts and molds. Their juice product passed all those tests with flying colors.

But what peaked my curiosity was the fact that a well established reference work in botany, "Hortus Third," states that *Morinda citrifolia* fruit "has been reported to be poisonous" (p. 742). Hortus gives no references for its cautionary statement. When I asked the "scientific director" of the noni company about this his response was not reassuring. He proceeded to lambaste me for daring to cite an out-of-date work from 1902. It was futile to point out that the edition I was citing dated from 1976 and that "Hortus Third" is an authoritative work, published by the Liberty Hyde Bailey Hortorium, a division of Cornell University. He has failed to send me any more recent data, however. (Any new developments in this regard will be reported at our Web site.)

One small manufacturer of noni pills gave the most entertaining response. He claimed on the Net that his product was "FDA Approved." Knowing a little about the FDA, I found that hard to swallow. When I wrote to him requested substantiation for this claim, he sent me this classic reply:

"About the being toxic, I wouldn't be in business today. Noni is like an apple or orange that you see on the fruit stand. Because it has been put in a capsule that doesn't make a drug."

Well, I guess that about settles it. □

caveats need to be emphatically stated. First, most of these studies were conducted with alcohol extracts of noni. I do not think this is how commercial noni juice is prepared. More to the point, the compound was *injected* into the peritoneal cavities of the animals whereas obviously human cancer patients are taking it as a drink. The dosage was multiples of what human patients are taking. So, while suggestive, **these studies** on transplantable tumors in animals (from a single lab) **cannot be considered definitive for human anti-cancer effects.**

XERONINE?

Much of the theoretical interest in noni has been stimulated by articles on the value of the fruit by Ralph Heinicke, PhD. Dr. Heinicke is a graduate of Cornell University and the University of Minnesota. He lived in Hawaii from 1950 to 1986, and worked for the Dole Pineapple Company, the Pineapple Research Institute, and the University of Hawaii.

Dr. Heinicke has discovered and patented an alkaloid he named "xeronine." Xeronine is an enigmatic molecule which rapidly comes and goes in the body. It is formed from "pro-xeronine," which Dr. Heinicke first isolated from pineapples and then from noni. (He states that it is no longer present in pineapple because of depleted soil.)

Heinicke writes that "identifying the pharmacologically active ingredient of noni has been difficult—for an understandably good reason. The active ingredient is not present in the plant or fruit! Only after the potion has been drunk does the active ingredient form. Sometimes!" he adds, with some humor.

Heinicke calls xeronine a "relatively small alkaloid...which is physiologically active in the picogram range." A picogram, mind you, is a trillionth of a gram.

Although the xeronine thesis is cited as dogma by noni salesmen, there is reason for caution. We found three patents relating to xeronine. But a search of Medline and CancerLit revealed *no* published peer-reviewed studies on xeronine or proxeronine. The words do not occur. We found only three papers by Dr. Heinicke on other topics. It is difficult to understand why he has not shared this discovery with the scientific community at large.

And while it is well known that alkaloids are highly bioactive substances, they are often present in much larger quantities in plants. Take for instance one of the best known of all alkaloids, nicotine. This can constitute up to *9.0 percent by weight* of tobacco leaves! (Robbers, James, et al. *Pharmacognosy and Pharmacobiotechnology*, Baltimore: Williams & Wilkins, 1996, p. 149) This is an astronomical amount compared to Dr. Heinicke's picogram-range xeronine. Some further explanation of xeronine's mechanism of action is clearly needed.

WHAT'S IN THAT NONI?

None of the distributors of the product have been completely forthcoming with information. But Morinda, Inc. did send me an analysis of the nutritional value of their product. It provides a significant amount of vitamin C, about 6-7 mg of ascorbic acid per ounce, about the same as orange juice. (At about 25 times the cost. The price of noni juice is \$30 to \$35 per bottle, plus \$5 S&H.)

Noni also contains 21 other vitamins and minerals, but in minuscule amounts. As the company itself makes clear, noni is "not a significant source" for any other nutrient. And since the product that was analyzed also contained blueberry and grape juice concentrates, as well as natural flavors, it is impossible to tell how much of the value of the final product is due to noni and how much to these well-known other ingredients.

TESTIMONIALS

Noni would just be another health food wannabe if it were not for the intense promotion going on in its behalf. Once again, it demonstrates the power of the Internet as an amplification mechanism for reputed "cancer cures."

Quite a few testimonials are being put forward about nearly miraculous effects from taking the juice.

Once contacted on the Net, a distributor then sent me a four-page tabloid called "Health News." This bore headlines such as "An Ancient Cure from Paradise," "Healing From Across the Seas," and "No More Wheelchair!" On the front page it clearly states that noni is "a healing fruit" that "helps cancer."

And what is "Health News"? It looks like an objective newspaper. But it is produced by a company that specializes in "Third Party literature for network marketing distributors." It is sold wholesale to network marketers who use direct mail to find and recruit new customers to become salesmen in their growing pyramid.

You will not find a single cloud in the blue Polynesian skies of Noni-dom. Noni, it appears, cures bowel obstruction, chronic fatigue, severe back pain, menstrual problems, sinus congestion, knee blow-out and water on the knee, and severe arthritis. It can also be useful in incurable cancer, they say.

"In Polynesia," a Utah man just returned from the tropics is quoted as saying, "anytime someone has an 'untreatable' or terminal illness — when it seems that everything else has been tried but nothing has worked — they reach for noni." Who are we to contradict him?

He tells how a Polynesian woman who "became a believer in noni after her friend's cancer went into remission after only two weeks of using the juice." You're

hearing that from me, who read it in a newsletter, from a guy who heard about it from a woman whose friend, etc. Yet this is the way that the word of noni's "miraculous" effects spreads. As the distributors will tell you, success in this field is dependent on telling great stories.

The noni sales force also maintains an "888" hot-line where both company officials and gratified patients tell their stories. I listened to one of these sessions and heard a cancer patient state that he stopped getting chemotherapy-associated infections when he took noni juice for just a few days. Another cancer patient declared that he felt remarkably better.

Let's hope these people are not deceiving themselves.

Noni is mainly sold by a multi-level marketing company in Utah. (They claim sales of \$1.5 million in October, 1996 and anticipate monthly sales of \$2.5 million by end of that year.)

"Do you have a problem with that?" a company spokesperson asked me, aggressively.

I replied that I might, because some of the "cured patients" heard on the tape now had a vested interest in the financial success of the product. They therefore might be tempted to exaggerate the benefits they received. The spokesperson was irate at this response.

He accused me of disloyalty to the capitalist system and made me sit through a lecture on the evils of the FDA and the glories of medical freedom of choice.

He also told me that his company "was not interested" in a story about noni and cancer right now. When I said that I didn't need their permission to write such an article, and that I wasn't looking for a relationship with his company of any sort, he was astounded.

"You just made my day. You're the first writer I've spoken to who hasn't wanted money to write about noni." Now there's a fine commentary on the state of medical journalism at the end of the 20th Century! □

NEW CANCER BOARD

The director of the National Cancer Institute has created yet another advisory council, the National Cancer Policy Board. It will be housed at the prestigious National Research Council and Institute of Medicine. The panel of 20 members, was created at the behest of Richard Klausner, director of NCI, who says he wants a "neutral forum" to hammer out a cohesive strategy for fighting cancer.

Here's a tacit admission that such a strategy has eluded NCI for the first 25 years of the "war on cancer." Klausner asked that the new board include "cancer survivors and policy-makers." Good idea.

But there is no mention of whether it will contain people knowledgeable about alternative medicine. If not, it will be yet another opportunity for change gone down the drain. □

Be careful about reading health books...

BOOKMARKS

...You may die of a Msprint—Mark Twain

“WE HAVE CONQUERED PAIN”

Dennis Brindell Fradin, “We Have Conquered Pain” —The Discovery of Anesthesia. Margaret K. McEdlerry Books, NY, 1996.

The history of anesthesia is filled with drama, intrigue and skullduggery.

For instance, did you know that ether, or “sweet vitriol,” was discovered in 1275 by a Spanish physician, Raymond Lullus. But it wasn’t until the 16th century that Paracelsus used it to anesthetize animals.

“It is taken even by chickens,” this eccentric genius wrote, “and they fall asleep from it for a while but awaken later without harm. **It quiets all suffering without any harm, and relieves all pain.**”

Yet this extraordinary observation was not followed up on by the medical profession for another 250 years!

At the end of the 18th century, another anesthetic was discovered: nitrous oxide. This was reputed to be fatal if inhaled. A brave teenager named Humphry Davy actually breathed some and found it to be such a euphoric that he nicknamed it “laughing gas.”

“Whenever I have breathed the gas,” he wrote, “the delight has been often intense and sublime.” In 1800 he published his “Researches, Chemical and Philosophical, Chiefly Concerning Nitrous Oxide” and first suggested that nitrous oxide “may probably be used with advantage during surgical operations.”

Later, as his fame grew, Fradin writes, “Davy looked back on his laughing-gas studies with embarrassment....” In the 1820s, another young British scientist Henry Hill Hickman came close to the discovery of surgical anesthesia. He sent his work to the Royal Society of London, whose president that year was none other than Sir Humphry Davy himself.

“Hickman’s work reminded Davy of what he considered his own misspent experiments of a quarter century earlier,” writes Fradin. “Sir Humphry and other leading scientists in England ignored Hickman,” who died at 30.

By the 1840s, nitrous oxide and ether had become popular entertainments. “Chemical lecturers” packed their laughing gas canisters onto carts, and travelled from town to town giving what were called “nitrous oxide demonstrations” at fairs, tent shows and meeting halls.

There were also “ether frolics” in private homes. This

activity inspired a Georgia country doctor named Crawford Long to use ether in the first surgical operation. On March 30, 1842 he removed a tumor from the neck of a medical student, James Venable. But for reasons that are still not understood, Long did not publish his discovery at the time, and no one outside Georgia knew about it.

On December 10, 1844 a Connecticut dentist named Horace Wells attended a public nitrous oxide exhibition at Hartford’s Union Hall. When “Professor” Gardner Colton, a disciple of P.T. Barnum, called for volunteers from the audience, Wells rushed to the stage. Despite his on-stage antics, Wells took time to notice that a clerk he knew had smashed his legs, but felt nothing. The next day, Wells had fellow dentist, John Riggs, extract a tooth from him when he was under the influence of the gas.

“I felt it no more than the prick of a pin!” he exclaimed. **“It is the greatest discovery ever made!”** He was probably right, too. Wells took his discovery to Dr. John Collins Warren, august founder of the *New England Journal of Medicine* and of Massachusetts General Hospital. In January, 1845 Wells demonstrated the value of nitrous oxide anesthesia at the hospital.

But Warren stacked the deck against him.

“There is a gentleman here,” he told his students, “who pretends he has something which will destroy pain in surgical operations. He wants to address you. If any of you would like to hear him, you can do so.” The audience began snickering even before the demonstration began.

A volunteer stepped forward. When Wells applied the gas, the man fell asleep. But when he pulled on the infected tooth with his forceps the patient groaned. At that moment the hall erupted with cries of “Humbug!” and “Swindler!” Devastated, Wells fled the lecture hall. The medical students and doctors were too busy hooting to realize that in fact the operation had been a *success* “and the failure was theirs” (ibid.). The patient later explained that he had “felt practically no pain.” But no one asked him. As Fradin sagely remarks:

“Was there ever a better example of Paracelsus’ comment to his fellow doctors three centuries earlier: ‘This is the cause of the world’s misery, that your science is founded upon lies. You are not professors of the truth, but professors of falsehood.’”

“Well’s failure, as it came to be known,” writes Fradin, “meant two more years of pain for surgical patients....”

In 1846, Wells’s former partner, dentist William Thomas Green Morton, had greater luck. He attempted once again to demonstrate the principle at Mass. Gen. This time the patient, Gilbert Abbott, remained

asleep and a tumor was painlessly removed from his jaw.

And this time, Dr. Warren exclaimed "Gentlemen, this is no humbug!" as if to exonerate his behavior in 1844.

Initially, ether anesthesia was a secret method. Wanting to patent it, Morton dubbed it "Letheon" and added oil of citrus to disguise its tell-tale odor. He was convinced to reveal it but as a result died a pauper.

To complicate matters, a prominent scientist named Charles Jackson, MD (brother-in-law of Ralph Waldo Emerson) laid claim to Morton's discovery. Jackson was diabolical and attempted to ruin the other discoverers.

Wells went mad and killed himself in New York's Tombs Prison. When Jackson visited Morton's grave and read the words, "Inventor and Revealer of Anesthetic Inhalation," he himself had a complete mental breakdown.

Standing there reading this inscription, Fradin writes, Jackson went mad on the spot. "His yells attracted the attention of visitors to the cemetery, who found him kicking and screaming like a baby throwing a tantrum." What a scene! The famous scientist was hauled off to McLean Asylum, where he spent the rest of his life. He is now buried near the monument to Morton.

Of the four, only Crawford Long lived a happy, honest and decent life. And, fittingly, he was the one who never sought to profit from the discovery.

This is an excellent book, highly recommended for young or old adults who want to know how medical progress is really made. □

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DIFFERENT VIRUS

Obviously no one is going to infect a patient with either hepatitis A or C in the hope of curing him. That is why Dr. Laszlo Csatory's idea makes such sense. For years, he been using the harmless Newcastle Disease Virus (NDV) for a similar purpose. NDV is almost completely lacking in side effects in humans. (The worst it has been known to cause in humans is conjunctivitis or "pinkeye.")

For over 25 years Csatory has insisted that one virus can beneficially interfere with another, either stimulating an immune reaction or else possibly competing for the same "landing sites" on cells which the more dangerous virus is also trying to take over.

This technique has been used with some apparent success in both herpes and hepatitis infections. But it also has been used in cancer. Like many scientists, Dr. Csatory believes that viruses are instrumental in either causing or promoting a variety of human cancers. He uses "co-infection" with a harmless virus to knock out more virulent cancer-related viruses. For this, he deserves both credit and support from those in established institutions.

Mainly, however, he has received indifference. □

AND NOW, COLDS AGAINST CANCER?

In October 18, *Science* magazine ran a story about how the common cold could be used to fight cancer.

Frank McCormick and his colleagues at ONYX Pharmaceuticals in Richmond, CA described how a mutant virus could be used to treat experimental tumors.

They implanted human cervical cancer cells into mice and then let tumors grow. They then showed that the virus reduced the size of those tumors and sometimes eliminated them. The mutant was a form of an adenovirus, one of the many viruses that can cause colds in people. This particular virus had a mutation that only allowed it to grow in cells lacking a protein called p53. While almost all normal cells synthesize p53, many tumor cells can't. It is believed that p53 guards against uncontrolled cell growth.

Doctors have begun trying to use the mutant virus in clinical trials. However, it should be noted that one scientist who first described the virus in 1987 is skeptical. "The virus has to grow inside the patient," he remarked, "but there will be a very effective immune response against it because most everyone was infected with this kind of virus in childhood," according to Arnie Berk of the University of California, at Los Angeles (quoted in *Science News* 11/30/96). □

The Cancer Chronicles

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SEE YOU ONLINE!

Starting with this issue, we are discontinuing the printed version of *The Cancer Chronicles*. From this issue forward we are going to be publishing *The Cancer Chronicles* entirely on the Internet. It can now be accessed exclusively through our Web site <http://www.ralphmoss.com>.

In addition, we have uploaded most of the articles from past issues of *The Chronicles*. All issues—past, present and future—will now be made available free of charge.

Visitors to this site will also be able to find information about Equinox books, and our Healing Choices service.

We make this move with some trepidation. We understand that only 14 percent of American homes are currently online. But we are heartened by the fact that we are now attracting over 200 new readers per day to our Web site. Such numbers are bound to grow exponentially.

We do not have the time and energy to do both the printed and the Internet version, and so (like 'Omni' magazine) we choose the Internet as the medium of the future. We truly regret "abandoning" our faithful and devoted print readers (and advisors). Perhaps this a good time for readers to get a computer or perhaps one of the new television-linked Internet services, such as Web TV.

So, thank you for your generous support over the past eight years. And see you online! □

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