Bitter Melon: Traditional Treatment Tried for AIDS

As many as 100 persons with AIDS or HIV in Los Angeles, California, may be using bitter melon (Momordica charantia) — a traditional herbal treatment, and also a food, in Philippine, Chinese, and certain other cultures — in the hope that it might be helpful as an AIDS treatment. No scientific trials have yet been run; and use of bitter melon as a possible AIDS treatment seems to be mostly limited to the Los Angeles area at this time. If bitter melon is found to be helpful, it would be important throughout the world, because this treatment costs very little, so people everywhere could afford it.

Interest in bitter melon for HIV began in two different ways:

First, academic researchers found two proteins in bitter melon which inhibit HIV in laboratory tests: MAP30, and momorcharin. But no one knows for sure what active ingredient or ingredients (if any) might have clinical usefulness.

Second, the public interest in bitter melon developed because of the work of one patient, who tried the treatment after learning that it was being tested in the Philippines for treating leukemia. He has used it for three years and reports very good results. He happens to live in Los Angeles, and has spoken at many AIDS meetings there. That is why the AIDS/HIV use of bitter melon is currently centered in that city.

So far there seems to have been little risk from this treatment; however, pregnant women must be warned that bitter melon extracts can induce abortion. Not everybody finds that this treatment works; some have reported that it did not seem to help. And if it does work, it may take four to six months for clear benefit to be seen.

Combination Antivirals: ddC Plus AZT Approved

The U.S. Food and Drug Administration has approved the drug ddC for treating people with advanced HIV infection, including AIDS — but only for use in combination with AZT. This approval, effective June 19, 1992, was based on two small, preliminary studies which showed much greater improvement in T-helper counts with the combination treatment than would be expected with AZT alone. (But a large study comparing ddC alone with AZT alone was stopped early, because the AZT worked much better; those treated with AZT had a lower chance of dying of AIDS than those treated only with ddC. That is why ddC was approved for use in combination with AZT, but not for use by itself.)

“ddC” is an abbreviation for the chemical name 2,3'-dideoxycytidine; it is also called zalcitabine (generic drug name) or
HIVID (brand name). The drug, developed as an AIDS treatment by Hoffmann-La Roche, was first approved in Austria, on April 7, 1992; Roche has also applied for approval, in over 20 countries in Europe.

ddC is inexpensive to manufacture, probably pennies a day. The reason is that very low doses are used; one kilogram is enough to treat 1,000 people for more than a year. But unfortunately, ddC may not be practical as a low-cost treatment which could be available anywhere in the world, since AZT is also required. AZT costs more to manufacture, and it also costs more to use, since blood tests are required to use it safely.

The main side effect of ddC is peripheral neuropathy, which causes numbness, tingling, burning, or pain in the hands or feet. If moderate discomfort occurs, it is important to stop the drug immediately. Sometimes half-dose treatment can resume later.

For more information about using ddC, see the “package insert” for the drug, which is written for physicians. A package insert is available in the United States, or in other countries where the drug has been approved.

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3-Drug Combination Trial: ddC+AZT+Interferon

Burroughs-Wellcome Corporation, which markets AZT, has found that a three-drug combination (AZT plus ddC plus alpha interferon) worked very well against HIV in laboratory tests — much better than the two-drug combination of ddC and AZT (which was recently approved by the FDA in the United States). The company has recently started a large clinical trial in the United States to see if this combination also works well in people. The trial, which started treating its first volunteers in late June, is comparing standard doses of AZT and ddC against the same doses of those drugs plus a dose of 3 MU of interferon injected once per day.

The form of interferon being used in this trial is Wellferon, a “natural” alpha interferon which contains at least 16 variants of the interferon molecule. Wellferon is approved in some European countries, where it is used for treating hepatitis B. Other brands of alpha interferon might be equivalent, but no one knows for sure.


Note: The controversial AIDS treatment Kemron is a form of alpha interferon similar to Wellferon. But Kemron treatment is very different from standard interferon treatment, such as that used in the Burroughs-Wellcome trial, for two reasons. First, Kemron contains doses of interferon which are thousands of times lower than those generally used. Second, Kemron is placed under the tongue, instead of being given by injection like conventional interferon treatment.

Hypericin: Antiviral from St. John’s Wort

St. John’s wort, a common plant which grows throughout the world, contains a chemical called hypericin, which may have broad-spectrum antiviral activity — against HIV, cytomegalovirus, human papillomavirus, influenza, hepatitis B, and perhaps other viruses. St. John’s wort has long been used in herbal medicine; however, the plant contains very little hypericin, and attempts to use crude extracts of it as an HIV treatment have had little success. It is relatively easy to chemically extract pure hypericin from the herb; but, because of commercial motivations and government regulations, this has seldom been done. There are reports that some people have had unusually good results with concentrated chemical extracts obtained through the AIDS treatment underground, but we have been unable to confirm these reports.

Instead, the commercial effort to develop hypericin has used a chemically synthesized version of the drug, not a plant extract; several years have been lost in testing this potential treatment, because of the time required to develop an efficient synthesis procedure, and for other reasons. Clinical trials are now being done at New York University, in New York City. In order to get good scientific data, these trials have given hypericin by intra-
venous injection — even though everyone expects that this drug will be used orally. Recently the dose had to be reduced, because a side effect was found; some people receiving the injections reported discomfort in their hands and face, probably due to phototoxicity (abnormal sensitivity to sunlight or other strong light), which has been seen in animal tests of hypericin. The trial is now proceeding with the reduced dose. As of early July, no data is yet available about the possible effectiveness of the drug as an HIV treatment. (Note: oral use may cause less toxicity than intravenous use. Also, there are reasons to believe that the purified plant extract may work better than the synthetic now being tested.)

What is most needed now is for research groups to extract concentrated hypericin from St. John’s wort, and try it orally as a treatment for AIDS or for the other viral diseases listed above, outside of the constraints which inhibit such research in the United States. A chemist, perhaps at a university, working together with a physician, could be the core of such a group.

**For More Information**

At least 30 articles have been published in scientific and medical journals about hypericin’s anti-HIV activity, and its success in treating retroviral diseases in animals. (The first of these articles appeared in *Proceedings of the National Academy of Sciences, USA*, July 1988.) We do not have space for a full bibliography here. *AIDS Treatment News* published reports on hypericin, including recent bibliographies, in issue #125, April 19, 1991, and issue #146, March 6, 1992; we will send these reports on request.

**Gamma Globulin: Inexpensive Treatment May Help Prevent Infections**

Intramuscular gamma globulin, often used by travelers to prevent hepatitis and other infections, might help to protect against AIDS-related opportunistic infections. However, it cannot protect against HIV itself.

This potential treatment was brought to our attention by Joseph A. Hertell, M.D., an internist who treats AIDS patients near Atlanta, Georgia. Dr. Hertell was involved in developing this medication in the early 1950s, when he was medical director of the American National Red Cross. Dr. Hertell is now using the Gammar brand, which costs about $30 for a multiple-use vial; he gives 2 cc of gamma globulin per week. He believes that his patients are getting fewer infections than they would otherwise, and that some are able to resume work and other activities as a result.

For more information on this use of gamma globulin, see “Gamma Globulin to Prevent Infections?” *AIDS Treatment News* #152, June 5, 1992.

**New Medical Journal Available by Computer**

Starting July 1, 1992, The Online Journal of Current Clinical Trials has been published by computer. This fully peer-reviewed journal is published by the American Association for the Advancement of Science, in Washington, D.C. — the same organization which publishes the journal *Science*.

This computer journal avoids all printing and mailing delays (as well as the wait for space in an issue) to get important medical information as rapidly as possible to doctors, scientists, and others. The articles are provided in typeset quality, complete with charts and other graphics, if your local computer equipment provides that kind of display. If not, you can read the text of the articles by computer, and then order typeset copies delivered by fax or mail if you want.

One advantage of this computerized journal, especially if you do not have easy access to a large medical library, is that when articles in *Current Clinical Trials* reference articles in other journals, the abstracts from those other journals are usually included in the computer, too, so you can see them immediately.

For international use, *Current Clinical Trials* is available through the Internet — but for text-only access at this time. To receive typeset-quality graphics, you currently need a computer running Windows 3.0 software, with a 9600-bps modem. Text-only access is available from any computer running software which emulate a VT100 terminal, with at least a 2400-bps modem. The full graphics interface is now being developed for Internet, and for Apple Macintosh computers.

A subscription costs about $100 per year plus telecommunication charges. For information about subscribing, call *Current Clinical Trials*, 202/326-6446, or send a fax to 202/842-2868.

**International Treatment Communication: About This Issue**

*AIDS Treatment News* has published more than 150 issues in San Francisco — twice each month for over five years. It is well known in the United States (see “Underground Press Leads Way on AIDS Advice,” by Katherine Bishop, *The New York Times*, December 16, 1991), and has subscribers in many countries. Recently we also decided to publish the *AIDS Treatment News International Edition*, designed for free distribution to AIDS organizations everywhere, and through them to their clients. This first issue of the *International Edition* is being distributed at the VIII International Conference on AIDS/III STD World Congress, July 19-24, 1992, in Amsterdam.

**International Medical Communication**

We have found that the biggest obstacle to international sharing of AIDS treatment information is not the language barrier. Instead, it is the great variety of medical traditions, the differences in economic circumstances, and the differences in AIDS itself, in different parts of the world.
In order to be understood by persons in many cultures and medical traditions, we chose a journalistic style modeled in part on the television network CNN. Each treatment article will be short. It will tell what people are doing, why they are doing it (whether their rationale or authority is scientific, traditional, empirical, or other), and how you, the reader, can get more information about that treatment if you want to. In this way the International Edition will try to report complex medical issues in a context that can be understood by both professionals and lay persons.

Because this newsletter is short and published only four times a year, translation, printing, and shipping will cost relatively little. We hope to raise money to provide free copies to AIDS organizations that want them, anywhere in the world. All costs, including shipping, should be funded, so that lack of money or of foreign exchange will not be an obstacle for anyone.

This newsletter must speak to two audiences — those who seek treatments regardless of cost, and those with little or no money who want to learn about treatments which they can obtain. The expensive treatments are not always better; sometimes big money creates its own dynamics far removed from practical experience. But usually the expensive treatments are studied scientifically, and the low-cost ones are not.

AIDS Treatment News International Edition will report about both. When data from scientific trials is not available, we will do the best we can through investigative journalism — while strongly supporting the scientific study of noncommercial treatments by agencies such as the World Health Organization. But before there is data, we should remember that until very recently, there were no scientific trials for any treatment; all drug development in history was based on clinical experience. With today's modern communication and information processing, plus laboratory science at academic institutions throughout the world, treatment development through practical clinical experience can be more powerful and more useful than it ever has been before.

Treatment Information Politics

When AIDS Treatment News began in 1986, there was little interest in AIDS treatments, because almost everyone believed that everybody with AIDS would die. There was never scientific evidence to support this social myth of universal death; in fact, there has long been evidence to the contrary. But people were already "written off" as lost, so there was little organized effort to save their lives. Instead, AIDS organizations tried only to prevent the spread of the infection, or to provide comfort and services for the dying.

What changed this fatalism was the development of a vigorous AIDS treatment activist movement, energized by people trying to personally survive the epidemic, and to help others do so. Today, non-government organizations like ACT UP and Project Inform negotiate with scientists and officials, with pharmaceutical companies and government agencies, to make sure that research is properly funded, and that clinical trials are designed so that they can be conducted effectively in the real world. Nonprofit groups called buyers' clubs help people obtain rational therapies at the lowest possible prices — whether or not those treatments are officially approved. Newsletters, including AIDS Treatment News, describe promising experimental treatments and summarize what is known, months or years before the information appears in medical journals — and critique government and corporate policies which are often negligent and sometimes politically malicious.

But in most of the world there is no treatment activist movement, and no organized effort to save the lives of people who already have AIDS or HIV. Government programs only try to prevent new infections. In one sense this policy may be understandable, since resources are limited and prevention costs much less than treatment; the same money spent on prevention can save many more lives than if spent on treatment. But treatment activism is also needed, because it can mobilize the energy of people who want to save themselves and their friends, greatly benefiting the entire fight against AIDS, prevention as well as treatment.

In much of the world, AIDS treatment is either nonexistent, or limited to what people can find among local healers and traditional medicines. Some of these traditional treatments may have great value, and be important for the world. We need more communication about treatments among the practitioners of different medical traditions, and among organizations in different countries. We need to develop ongoing working relationships, so that the international treatment community can know itself better, and can judge who is credible and who is not.

We hope that the AIDS Treatment News International Edition will contribute to this development.

Funding

AIDS Treatment News has been supported entirely by subscriptions and unsolicited gifts; we do not seek or receive government, foundation, or corporate grants. We paid for this first issue of the International Edition with our own funds. But future issues must be funded to allow translation and printing in Spanish, French, and other languages, and free distribution to agencies throughout the world.

To preserve editorial independence, AIDS Treatment News prefers not to receive this funding directly. Instead, we want to work with other organizations which can act as fiscal sponsors, and manage the translation, printing, and distribution of the newsletter. Funding could come from corporations, foundations, government agencies, or individuals.

Note:

(1) You may reproduce this International Edition, either by photocopying, or by republishing these articles either in English or in translation. We ask that our address and fax number be included. No permission is necessary, but we suggest that you contact us in case more recent information is available. Also, we can mail master copies (originals from a laser printer) so that your copies will have the best possible print quality.

(2) When the International Edition refers to articles in the original AIDS Treatment News, we will fax or mail those articles upon request, without charge.

(3) To contact us for any reason — to be on our mailing list for future copies of the International Edition, to tell us about treatments we should cover, or to discuss the content of this newsletter, write or fax to: AIDS Treatment News International Edition, Post Office Box 411256, San Francisco, California 94141. Our fax number is 415/255-4659.