

Using Botanicals with Antiretroviral Effects.

For anyone who has not yet started HAART, or who is considering doing therapy interruptions, it might be important to consider the use of certain herbal remedies that have no serious toxicity and don't cause serious side effects, but may provide at least some antiretroviral benefit. Herbs are unlikely to have the power of a HAART regimen, but might provide sufficient benefit to at least help slow disease progression, especially in the context of the integrated approach discussed above. There are anecdotal reports that the following herbs, often used in combination, have resulted in significant drops in viral load and CD4 increases. There is a good history of use of some of these herbs beside the scattering of clinical studies. As with any intervention, they don't work for everyone, but NYBC has seen some good responses. (Reported in Abstract Poster 42388, *Case reports of potential combination therapy using botanical substances, selected on the basis of their antiviral activity* at the 12th International Conference on AIDS, 1998.)

The best way to use these is to start a combination on the day you get blood work done that includes a PCR for your viral load (HIV level). That way you can determine if the combination is helping you. As ever, a trend over several draws may give you an idea of how strong the effect is, if any: it's the trend that counts. And, as ever, do not neglect the rest of your blood work and keeping track of how you feel. But with this combination discussed below, the primary effect we're looking for is that it knocks the viral load down.

Bitter Melon (*Momordica charantia*). The fruit and leaves of this plant are most often used. Each bottle, 100 capsules. Each capsule, 500 mg. Test tube studies have shown antiviral and immune modulating effects. Highly concentrated to maximize the presence of all three active proteins. Regulates blood sugar levels. Antiviral effects from fruits, seeds, leaves and vines. Hot water and alcohol extracted. Each gram is equal to 25 grams of whole plant. Not standardized to any particular protein (e.g., MAP-30). Do not use during pregnancy.

Curcumin (Turmeric; *Curcuma longa*)

A Search Alliance (now AIDS ReSearch Alliance) study of curcumin found a significant reduction in viral load on 18 PWHIV over 20 weeks. This compound works against a part of HIV called the long terminal repeat (LTR) which was the basis for a couple of small clinical studies to evaluate its antiviral effect. Curcumin has been known to be a potent anti-inflammatory and antioxidant used in Ayurvedic (Indian) medicine for several thousand years. The work at Harvard University showed it to inhibit HIV's incorporation into cells, as well as viral activity in already infected cells (virus that has already been incorporated into cells and is actively replicating). A study conducted by the New England CRIA found no effect using either of two dosages on either CD4 count or viral load. This study, however, was conducted for only 8 weeks, which may not have been long enough to see effects. (While we don't know if the way they suppress HIV is similar, it may be noted that SPV-30's effects also take 4-6 months before they are seen; this may be true of various therapies that either rely on re-regulating cellular function or inhibit latent HIV as opposed to preventing cells from being infected). Results of the Search Alliance study took five months. See NYBC's Combination Herb Therapy paper.

Curcumin (NYBC). Each bottle, 60 capsules. Each capsule, 500 mg turmeric extract (95% curcumin) in a base of brown rice. Caution: due to curcumin's effect on inhibiting platelet aggregation, some people may notice a loss of platelets. One NYBC member experienced this; if your platelet level drops, stop the curcumin. PWHIV are taking 3 grams per day: 2 capsules 3 times per day always with food when attempting an antiviral dose. Lower doses (1-2 grams per day) are used when using curcumin in a broad-spectrum antioxidant protocol. The higher dose may cause GI distress and gas in some. Start with a lower dose and work your way up over a week or so.

SPV-30 (*Boxwood, Buxus sempervirens*). An open label study (all participants knew what they're taking) was conducted in the United States. The results suggest a moderate reduction in viral load for users that had a higher than 40,000 viral load at the beginning of the study. Improvement in quality of life parameters were recorded by some. People who either added antivirals or did not use antivirals saw better results in terms of viral load decreases than those that remained on stable antiretroviral therapy. The effects on viral load were not very strong (about 34% lower after 6 months) and lie within the variability of the viral load test. As monotherapy, SPV-30 has minimal antiviral effect.

The controlled French study indicates disease stabilization in asymptomatic people. There was no effect on viral load compared to placebo; indeed, a higher dose was comparable to placebo. At the standard dose, what was seen was a slower increase in viral load compared to people on placebo. In other words, a modestly slowed progression rate. There was no significant effect on CD4 counts. So alone it doesn't do much--but neither does AZT alone.

This herb is safe at the dosages used and for some people seems to have a moderate value. The benefits, such as they were, came only at the lower, suggested dose. More is not necessarily better! It may operate as an antioxidant or by suppressing overactive immune function. This herb may be more useful as part of a combination approach.

The important thing about this trial is that it was done. We now have better information for making treatment choices. Indeed, this trial underscores the fact that the clinical effect of herbs CAN be meaningfully investigated. The

FDA and NIH have long held that such studies are virtually impossible. Their wholly unscientific bigotry MUST end!! We need realistic, sensible and sane government to address what thousands of us are doing every day. A new organization, the Foundation for Integrative AIDS Research (FIAR) was founded recently to raise funds to design and implement such studies. For more information, see <http://aidsinfonyc.org/fiar/index.html>.

SPV-30 (Arkopharma) Each box contains 90 capsules, a months' supply. Each capsule contains 330 mg of boxwood leaf powder. Vegetarian--capsules are a cellulose derivative.

PWHIV take 3 per day 8 hours apart with or without food. Do not refrigerate. Do not exceed three per day.

Note that Jarrow Formulas has suspended the GL Forte glycyrrhizin product. NYBC is looking for an alternative.

NYBC Anti-viral Botanicals:

Bitter Melon 500mg x 100	10/d (5empty stomach/morning, 5 empty stomach /evening)
Curcumin 95% 500mg x 60	6/d (2B, 2L, 2D)
SPV-30 330mg x 90	3/d (1B, 1L, 1D)

NYBC will also be carrying TLZ-6, also known as *Spring Break* by late spring of 2007. This is a Chinese formula designed specifically for those NOT on antiretrovirals. Those who wish to use this are strongly urged to share blood work to aid in the clinical evaluation of what effect the formula may be having on your numbers and health. An informed consent document will be available, along with instructions in best use. Please contact NYBC if you are interested in trying this approach.