

hepcBC.bull **BC CHAPTERS NEWS BULLETIN** **HEPATITIS C SOCIETY OF CANADA AUG. 97** **Issue No. 3**

NATUROPATHIC TREATMENT OF HEPATITIS C

by Dr. David Bayley, BScK., N.D.

Dr. Bayley can be reached at the Delbrook Naturopathic Clinic in North Vancouver at (604) 986-9191.

PART ONE: Clinical Indications for the use of Lipotropic Factors. [See June, 1997 Issue of *hepcBC.bull*]

PART TWO: Vitamins and minerals.

PART THREE: Homeopathic preparations. [See upcoming issue]

Part Two: Vitamins and Minerals

To understand the role of vitamins and minerals in hepatitis it might be useful to review some definitions and basic liver functions.

Metabolism is a Greek word meaning to change. When the liver or any other part of the body metabolizes something it is to make that something more useable or less toxic. For example, the liver can metabolize protein (change it) to glucose. The muscles can metabolize glucose to energy. The liver metabolizes many drugs to activate them. It also metabolizes many waste products and unwanted drugs and toxins to break them down and prepare them for elimination from the body. Smoking, caffeine, junk food and many drugs inhibit liver metabolism. Metabolism is usually already impaired in the liver when there is inflammation (i.e. hepatitis) so further inhibitions should be avoided. Some drugs have the opposite effect and speed up liver metabolism so much that the liver becomes damaged by the intermediate products produced by its own metabolism. Alcohol, Phenobarbital, and acetaminophen are examples of inducers (speed up) of liver metabolism.

Vitamins are essential for metabolism processes but can not be made by the body and must therefore come from foods or vitamin pills. Many minerals are also essential for the proper functioning of metabolism processes.

All of the B vitamins are involved in energy metabolism. The liver requires lots of energy to remove waste from the body. The liver's energy is impaired during infection so a B vitamin complex of 100 mg/day helps most hepatitis patients feel better. Some B vitamins should also be injected. Vitamin B6 for example, is important in the formation of protein, neuro-transmitters, red blood cells, hormones and in the function of the immune system. Vitamin B6 (pyridoxine) needs to be activated by the liver to pyridoxal-5-phosphate before it can be used by the rest of the body.

People with active liver disease have difficulty activating B6, so weekly injections of the active form by their physician can help with many hepatitis symptoms. An extra source of magnesium (150 mg/ day) is a good idea because most of vitamin B6's activity is magnesium dependent. Vitamin B2 (found in the B Complex) is essential for B6 activation.

If you are going to get B6 injections from your physician, it would be a good idea to include vitamin B12. Vitamin B12 injections can help with symptoms of fatigue, depression, stress, memory loss, tendonitis, asthma and numbness. Even when blood tests indicate serum B12 levels are normal, injections often help you to feel better. Most of the body's B12 is stored in the liver. These stores are effected by liver diseases.

Much of the damage sustained by the liver during inflammation is due to oxidation and free radical damage. This is the process by which we grow old. When we have an inflamed organ like in hepatitis that aging process is fast forwarded!

Vitamin E is the body's most important antioxidant and free radical scavenger. I usually recommend 400IU/day of clear base vitamin E plus selenium 50 - 150 IU and vitamin C 1000-3000 mg/day. Vitamin E doesn't work without selenium and is regenerated in the body by vitamin C.

Vitamin C is also an antioxidant, enhances immune system activity, is anti-viral, and has many effects similar to interferon.

There has been some exciting research showing that intravenous vitamin C can greatly improve acute viral hepatitis in 2 - 4 days. This is a procedure that only some naturopathic physicians and specially trained MDs are familiar with.

Many patients with advanced liver disease develop a multitude of skin lesions. These usually clear up quickly with zinc supplements. White spots in your finger nails can be a sign of zinc deficiency. Zinc also reverses neurological damage caused by Wilson's disease (a copper storage disease of the liver). A dose of 10-15 mg/day of zinc citrate or zinc picolinate is safe and effective. Higher doses should be taken under an N.D. or M.D.'s supervision.

One of the most important metabolism functions of the liver is a process called methylation. S-adenosyl methionine (SAM) is the liver's most important methyl donor. A healthy liver can make as much SAM as it needs. Unfortunately SAM production is impaired in hepatitis. Oral administration of SAM (800 mg/day) has been demonstrated to improve symptoms of pain, moods, fatigue, morning stiffness, bile flow, general malaise, digestive disturbances, allergies, chemical sensitivities, PMS, constipation, and is protective against liver cancer in patients with chronic liver disease. Not bad for something that's cheap and has no side effects.

And finally, remember this: even doctors are warned not to treat themselves. You cannot be objective and therefore effective when self-medicating. Seek the help of a naturopathic physician before using these substances. Natural is not a synonym for safe, so natural medications need to be treated with respect.

Stay tuned for more on glandulars and the homeopathic treatment of hepatitis [in PART 3 OF THIS SERIES, in an upcoming issue].

? HEPATITIS C SOCIETY - U ASK

*by Natalie Rock, BScN
Hepatology Clinical Research Nurse
Dept. of Medicine U.B.C.
Vancouver Hospital Div. Gastroenterology*

Dear Natalie,

Question One: Have you found any alternative therapies that support or are good for HCV?

Patients are commonly trying alternative therapies for the treatment and management of hepatitis C such as Milk Thistle, Shark Cartilage, Echinacea, Dandelion, Vitamin Regimes, etc. In assessing over 500 patients in our clinic, many of whom are taking various alternative therapies, there is no apparent difference in the clinical course (enzyme level, viral levels) of those taking alternative therapy versus those who are not. However this is not to say that there is no benefit from some alternative therapies. Patients have reported that taking certain herbal preparations have helped in the alleviation of symptoms of HCV and therefore alternative therapies are not discouraged. Certainly there is much needed research to be done in this area.

A healthy lifestyle is important in the body's ability to deal with chronic disease. Thus, the maintenance of good nutrition through a well balanced diet, and appropriate rest and exercise are very important. Other therapies such as massage therapy, therapeutic touch, acupuncture, etc may help patients cope with and deal with the symptoms of the disease.

Question Two: Are there any preliminary results in from the INF/Ribavirin trials?

The preliminary results of the INF/Ribavirin trials are encouraging. In a small Italian study (Brilliant, Oct/96), seven out of eight "relapsers" (previously treated with Interferon but did not have a sustained response) who were treated for six months responded to combination therapy and after a three year follow-up had a sustained response (normal ALT, and negative HCV RNA) On the other hand, only one out of seven "non-responders" (previously treated with Interferon but did not have a sustained reduction in their ALT or HCV RNA), achieved a sustained response after a three year follow-up. Presently, a combination INF/Ribavirin study is under way at the Vancouver Hospital with 48 relapsers and 29 non responders currently enrolled. An initial assessment suggests very encouraging results, but only a few patients have completed the twelve month treatment course and results are still being analyzed. This study is part of a world wide multicenter study which incorporates a large number of patients so that meaningful results will be available over the next year. The success of this combination therapy, however, will need to be determined not only at the end of therapy, but

also one, three, and five years after completion of therapy.

BC EXPERTS IN LIVER DISEASE-- ADDITION:

Dr. Joe Sasadeusz at the Viridae Clinic at 1134 Burrard Street, Vancouver, BC.

Phone: (604) 689-9404 Fax: (604) 689-5153. Ribavirin and Interferon combination therapy trials are being conducted at the clinic.

DISCLAIMER:

HeCSS cannot endorse any physician, product or treatment. The guests invited to our group to speak, do so to add to our information only. What they say should not necessarily be considered medical advice, unless they are medical doctors. The information you receive may help you make an informed decision. Please consult with your health practitioner before considering any therapy or therapy protocol. The opinions expressed in this newsletter are not necessarily those of the organization.

COMING UP:

Victoria Chapter

Meetings: last Wednesday of each month 1 - 3 PM, and again at 7-9 PM, St. John the Divine Church Lounge, 1611 Quadra St. (Entrance through the rear, marked Annex)

NEXT MEETINGS: July 30th "Planning for the Year Ahead", (bring your ideas) and Aug. 27th, speaker TBA.

Vancouver Chapter

Meetings: First Thursday of every month, 7:30pm, 5745 Wales Street, Vancouver. (between Nanaimo & Rupert on 45th Street)

NEXT MEETING: August 7th.

Penticton Chapter

Meetings: Third Thursday of every month, 7-9 PM, Penticton Health Unit - Board rooms.

NEXT MEETING: Aug. 21st

Kelowna Chapter

Meetings: Last Saturday of every month, 1-3 PM, Rose Avenue Education Room in Kelowna General Hospital.

NEXT MEETING: No meetings during the summer.

Vernon Chapter

Meetings: Changed to the second Tuesday of each month, 2-4 PM, in the Independent Living Center at the People Place.

NEXT MEETING: Aug. 12th

HOW TO REACH US:

hepcBC.Bull CO-EDITORS

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CANADIAN LIVER FOUNDATION [CLF]

Chapters of the Canadian Liver Foundation in your area are located in Kamloops and Vancouver.

Residents of Vancouver and surrounding areas can reach the local chapter at 681-4588. Fax: 681-6067. The chapter president is Mark Quirk.

#545-1130 W. Pender Street, Vancouver, BC, V6E 4A4.

Call toll free (B.C. only): 1- (800)- 856-7266

CLF UPDATE

The CLF's Greater Vancouver Chapter is hosting a Hundred Hole Challenge Golf Tournament on August 11, 1997 at Swan-E-Set Resort and Country Club. It is shaping up to be a really great day with golfers collecting pledges to play 100 holes of golf to raise funds for research. Anyone who would like to volunteer or play should call Michelle Scarborough at the CLF office (681-4588).

The Information Seminars sponsored by the CLF were recently held in Vancouver. This series of two seminars was designed to update service providers and injection drug users on Hepatitis C and received high praise from those who attended.

We are also looking for volunteers to assist with some other fundraising initiatives being planned for the fall and for our next seminar series, so if anyone would like to help, please call Michelle.

BOB HASTINGS

Victoria Chapter has lost another long-time member of its group. On Sunday, July 13th, Bob Hastings from Fanny Bay passed away from complications due to Hepatitis C. Bob was a musical promoter with Ace Bookings. The 45 year old, born on Vancouver Island, died at home. He is survived by his wife, Leona.

VICTORIA MEMBERSHIP DESK

The Victoria office is running much better as we become more organised, but again, we appeal for a few more hands for it to be effective in the community. The telephone number is 388-4311. A reminder: there are raffle tickets to be sold. Contact Judith at 592-0252.

Membership Clarification: Being a member in good standing in the HeCSC means that you have made application on the required form, which, together with your cheque (Made payable to HeSCS for \$20.00), has been mailed to the head office in Toronto, either directly or through your chapter secretary. A tax receipt and membership card will be issued by Head Office and you will receive the national newsletter. Touching base with your local chapter (just being on our BC database), and receiving the BC newsletter, does not make you a member in good standing of the Society, even though you have subscribed (\$10.00) to the BC newsletter. (*hepcBC.bull*) We urge you to take out a membership. It helps when we apply for grants and place issues before both provincial and federal governments. With all this downsizing about, it is much more difficult to obtain funds to enable us to keep the awareness program up and running. The more we do, the more is required of the program, hence the need for more funding.

Enough from me, have a nice summer!!!!

Another Reminder:- (Gosh, I'm full of them) Any change of address, phone number or Postal Code, please let me, your phone contact (in Victoria) or your chapter sSecretary (B.C) know at your earliest. It saves our meagre funds. Thanks.

386-8227

Jim Lodge

Vice-chairperson, Membership Chair, and Acting Secretary

e-mail: ut301@freenet.victoria.bc.ca

VICTORIA CHAPTER PHONE SURVEY

How could the Support Group help you more? Any special needs the Group could consider? Any ideas for more interesting meetings?

If you could input on any of these questions, phone any member of the Steering Committee or pass on your ideas to your telephone committee person when they phone you. Thanks!!!!

VICTORIA VOLUNTEERS NEEDED

Samaritan Committee: Volunteers are needed to visit our hospitalized or homebound members, or to see that those in need get help from community services. Please call 388-4311.

8 K. Run: Volunteers are needed to act as marshalls and to man the registration table, etc. Please call 388-4311.

Victoria Chapter HeCSC acknowledges the personal donations, donations in kind and memorial donations received to date and the following for discounts, donations of services, or equipment: Monk Office Supply. CFA 1070 Radio, and Apple Canada..

SUBSCRIPTION FORM

Please fill out include a check made out to **HeCSC - Victoria Chapter**, Send to:
Hepatitis C Society of Canada, Victoria Chapter
1611 Quadra St. Victoria, BC V8W 2L5
or FAX to: **(250) 479-5290**

Name: _____
Address: _____
City: _____ Prov. _____ PC _____
Home(____) _____ Work(____) _____

One Year Subscription **\$10.00**

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Vancouver Chapter.....

Okanagan Chapters.....

"I cannot afford to subscribe at this time, but I would like to receive the newsletter.

I am applying for a grant."

"I would like to make a donation so that others may receive the newsletter without charge"

(A limited number of newsletters will be available free of charge at the meetings, as well.)

HINT: Some brave souls are subscribing their doctors.

The Hepatitis C Society - **Vancouver Chapter Updates**

Darlene Morrow,

1203 Plateau Drive, North Vancouver, BC, V7P 2J3

darmorr@uniserve.com

FROM THE OKANAGAN

Dear Members,

Wow, another newsletter! I cannot believe how time flies! We must be having fun here, in the sunny Okanagan.

Penticton will be holding their regular monthly meetings over the summer, giving the newly diagnosed a chance to meet other heppers and share some experiences.

Kelowna will not be holding any meetings over the summer. Elaine has just got out of the hospital, after being hit by a mega virus that really knocked the stuffing out of her. We are glad you are starting to feel better, Elaine.

The Okanagan is looking forward to Tim's visit. He is expected to be here in August or September. Plane reservations have not yet been made!

In June, I ventured to Castlegar, with my support system, to help Robin facilitate the starting of a new chapter. He did a great job and I look forward to seeing this group grow. I am so glad I finally got to meet everyone face to face, especially Betty. She was the first mother I had ever spoken with.

I did not go to Washington, DC in June. The AASLD was not too keen on having heppers at the research weekend. I could have gone, but only if I agreed to not participate.

I will be going to Kamloops for an August 2, 1997 Public Information Symposium on Hepatitis C. I am really looking forward to watching another support group get going. Thank you, Linda, for inviting me.

If you would like to attend the Penticton support meeting, we will be at the Health Center on July 17th and again on August 21st from 7 to 9 PM on both nights.

Take care and enjoy the summer.
Leslie

VICTORIA RAFFLE

PROCEEDS TO THE VICTORIA CHAPTER OF HeCSC. Tickets: \$1.00 each, or 5 for \$4.00. Draw Date: September 24, 1997 at 1:30 PM at 1611 Quadra St., Victoria, BC, V8W 2L5. Contact: Judith C. Fry, (250) 592-0252, or write to her at #302-3205 Wetherby Rd., Victoria, BC V8P 4A3.

CUPID'S CORNER

This column is a response to requests for a personal classified section in our news bulletin. Here is how it works:

To place an ad: Write it up! Max. 50 words. Deadline is the 15th of each month and the ad will run for two months. We'd like a \$10 donation, if you can afford it. Send checks payable to **HeCSC Victoria Chapter**, and mail to R. Hicks, Box 263-453 Head St., Victoria, BC V9A 5S1. Give us your name, tel. no., and address.

To respond to an ad: Place your written response in a separate, sealed envelope with nothing on it but the number from the top left corner of the ad to which you are responding. Put that envelope inside a second one, along with your check for a donation of \$2, if you can afford it. Mail to the same address as above.

Disclaimer:

R. Hicks and/or HeCSC cannot be held responsible for any interaction between parties brought about by this column.

Ad no. 1

Life should be an adventure. If you are female, 35/40ish, know how to sail or would like to learn, and love life, I live on a comfy sailboat with a spectacular view of Victoria Harbour. I am trim, fit, and my mom says I'm handsome. Let's talk about the possibilities!

Ad no. 2

European lady looking for serious relationship/companionship with 60+ gentleman who likes walking, going out for dinner- to make life richer.

VITAMIN C MAY COMPENSATE FOR GENETIC DEFECT

Information contributed by R.K. of Parksville. From an article "Vitamin C vital to good health" by John Yim, a naturopathic physician.

You're missing an enzyme. Yes, you! All humans, along with some other animals such as guinea pigs, fruit bats, and other primates, lack the same enzyme, as well. Most creatures have the ability to make their own vitamin C from glucose, but we lack the enzyme that makes this process possible.

So what? Well, for starters, vitamin C protects us from cancer causing agents, viruses, bacterias, toxins, radiation and stress, to name a few. Dr. John Yim, expressing his views in *Health* magazine, believes we need supplements of vitamin C to protect us every day, and to be as healthy as is possible. By supplementing our diet, he states, we

compensate for our genetic defect. He suggests 55 mg. per kilogram of weight, or 4000 mg. for a 160 lb. adult. He advises that we increase the vitamin C slowly, taking an increasing amount at each meal, until one develops gas, loose stools, or diarrhea. Once this happens, one should lower the dose to what would become your daily intake, which could be between 2000 to 12,000 mg., or you can use the body weight formula. He suggests taking as much as you can tolerate if you need to fortify your immune system, since vitamin C is beneficial for allergies, cancer, diabetes, arteriosclerosis, hepatitis, and the healing of wounds, as well as preventing damage by free radicals. Yes, it may slow aging, he says. Hmmm.... Sounds good! Since it is water soluble, vitamin C is generally safe. Some people taking high doses routinely for a long time might develop kidney stones, so if this is your case, get checked for urine oxalate levels.

Vitamin C can be an inexpensive way to improve your general health and immune system.

HYPERICIN

Laird Baldwin, a former resident of Vancouver, wrote the following, which I found interesting, especially from the viewpoint of the investigation he has done. (Reprinted with permission.)

Dear Heppers,

I learned quite a while ago that hypericin, a derivative of St. John's Wort, had shown strong anti-viral capabilities, so I tried some, with little effect. A year or two later (about four months ago) I learned that the extract was questionable, probably containing little hypericin, and that I had been taking far too little. I got in touch with some doctors in Israel, who are working with other doctors in Germany and New York. One of the docs in Israel, at the Weizman Institute, also works in the Department of Pathology at NYU. Here are extracts from the most recent letter he has sent me, as well as an excerpt from a 'pre-print':

"...there is abundant scientific information regarding the antiviral activities of hypericin, but none on our most recent clinical findings using hypericin calibrated preparations of St. John's Wort (*Hypericum Perforatum*) in patients with hepatitis C. There is a preprint of a manuscript that we have just recently submitted to a hepatology journal, but I was not yet informed whether it was accepted for publication or not. (Mainstream medical journals don't like plant extract studies too much...) The medical doctor with whom we have been collaborating is Dr. Steinbeck-Klose in Bonn, Germany. Her telephone number, in case you might want to discuss this treatment with her, is 49-228-210551."

July 4, 1997 - My latest blood work is still far above normal (GGT: 106; AST: 162; ALT 270), but this report shows the second decline since I started taking fifteen capsules of hypericin per day. My enzyme levels have steadily been creeping up since I quit IFN several years ago and these are the first declines (ALT & AST had been in the 400 range before I started) Blurriness in my left eye has cleared up and I am feeling well, with no side effects noted. I found a "hypericin homepage" which mentioned Solaray Hypericin as being safely standardized. <<http://www.hypericum.com>> My first month I was only on Solaray, waiting for the Israeli stuff to come in the mail. The 2nd month I took mostly the Israeli hypericin. The stuff from Israel is much more expensive (over \$100 per month, compared to < \$50/month, Solaray) and the first month's results were better than the second (which might mean very little, except that both seem to work.) At any rate, I am going to try the Solaray for a few months and see how it goes, though I am very grateful to the Israeli docs for straightening me out on the dosage. Their product is probably superior - except I am not sure if it might break down a bit in shipping.

(Please contact Laird Baldwin, <baldwin@VIRTU.SAR.USF.EDU>, or Joan Diemecke (250) 479-5290 for suggested hypericin dosages.)

HYPERICIN TREATMENT OF HEPATITIS C.

Editor's note: This is a summary of an article by A.M. Steinbeck-Klose, M.D:

Preparations from the plant *Hypericum Perforatum* (HY) were studied in patients with hepatitis C. HY prevents virus uncoating during de novo cell infection, inactivating lipid enveloped viruses. It inhibits Protein Kinase C activity. Nineteen patients took part in an uncontrolled open study, receiving daily oral *Hypericum* preparations equivalent to 0.04 - 0.06 mg/kg. Significant declines in HCV load were seen in 16 patients throughout follow-up periods of 4-22 months. Blood HCV converted negative and was no longer detected in three patients for follow-up periods of 5-6 months and in two more patients for 4 months (total responders 31.6%). No side effects were detected during treatment periods ongoing for 22 months. HY seems to be resilient to development of drug resistant mutants. Thus, *Hypericum* has the potential to emerge as an effective, inexpensive treatment for chronic hepatitis C.

Address correspondence to:

Dr. Gad Lavie, Blood Transfusion Center, Sheba Medical Center
Tel-Hashomer 52621, Israel
Tel: 972-3-5303506
(end of excerpted article)

VERY IMPORTANT: Make sure any hypericin you buy is standardized and tells you how much hypericin it contains.

ADVOCACY ANNOUNCEMENT

CLASS ACTION SUITS:

If you received a transfusion **after August 1, 1986**, contact:

Bruce Lemer

1550-1625 Howe St. - Vancouver, BC V6C 2T6

Tel. 1 (604) 669-4004

Fax: 1 (604) 669-4224

If you received a transfusion **before August 1, 1986**, contact:

David Klein

Klein-Lyons [legal firm]

500-805 W. Broadway - Vancouver, BC V5Z 1K1

Tel. 1 (604) 874-7171

TRACEBACK PROCEDURES:

Contact: Lives Medical Office, Canadian Red Cross

1-(888) 332-5663, Local 207

Ask for Dr. Jefferson or Dr. Dole

This information is for anyone who has received blood transfusions in Canada, if they wish to find out if their donors were Hep C positive.

I'VE BEEN DIAGNOSED...NOW WHAT ?

If you're diagnosed with hepatitis C, get informed. Check with your local support group. (If in doubt, call 1-800- 652-HEPC)

Make sure that you:

- Get re-tested to confirm the diagnosis.
- Get vaccinated against hepatitis A and B.
- Are sent to a specialist.
- Get copies of all tests.

The specialist should:

- Order an ultrasound yearly, if your family doctor didn't.
- Order an alphafetoprotein [AFP] test yearly.
- Order a liver biopsy. (This is usually done by needle aspiration, but there are other options if there is a bleeding problem, for example.)
- Discuss treatment options with you. (Get a second or even a third opinion if you don't agree.)

PIONEER IN HEPATITIS C SUPPORT RETIRES

by Darlene Morrow

For many people, the HEPV-L list out of St. Johns has been a lifesaver. HEPV-L is a hepatitis virus online list server, established in February 1995 by Geff Thorpe. The HEPV-L hepatitis C support group provides information and support for patients with chronic hepatitis and related liver problems. Geff enlisted the help of Patricia Johnson, Dave Scherman, Sara Amber and Cindy Torchin, who are now co-list owners and volunteer their time to maintain the list. This month the HEPV-L list was featured in Infectious Disease News.

Patricia Johnson is known to many as Peppermint Patti. On July 11 Peppermint Patti announced her retirement from the HEPV-L list. Patricia had untiring devotion and dedication to helping people with HCV. Health problems and a change in paths have led Patricia to sign off the HEPV-L for the last time on July 11. She will be sorely missed.

ATTENTION ALL HEPPEERS!

The Supreme Court of Canada has heard the appeal from the Canadian Red Cross. The Supreme court judges should be reaching a decision very shortly.

Eight weeks after their decision, Justice Horace Krever will be handing over 3 years worth of his blood, sweat and tears to the federal government.

We are hoping to have our hepatitis C quilt there (Ottawa or Toronto) when the report and recommendations get handed over. The media will not miss this one!! So far it is 52 - 12 x 12 squares big and VERY impressive! If you have not already done your square, please do so. This way you will be represented, even if you can not make it!

We are also hoping to have many transfused persons in Ottawa (or Toronto) as well. We are suggesting you approach your federal MP and ask if they could possibly assist you be there by letting you use their air miles. (Especially if yours is a reform MP, you will find that they support Krever and the rights of the transfused.)

Quilt squares can be forwarded through your local chapter to me, or you can send them directly to:

Leslie Gibbenhuck

RR2 Site 5 Comp 10, Penticton, B.C. V2A 6J7

REMINDER: Squares are to measure 12 X 12, if red cloth is used, yellow hand print - if a bright yellow square is used, red hand print. Black should be used for name, message etc. Please leave at least a 1 inch border clear so I have room on all sides to attach it. Thanks.

THE LONG TERM EFFICACY OF GLYCYRRHIZIN IN CHRONIC HEPATITIS C PATIENTS

Arase Y, Ikeda K, Murashima N, Chayama K, Tsubota A, Koida I, Suzuki Y, Saitoh S, Kobayashi M, Kumada H - Cancer 79 (8): 1494-1500 (1997)

Department of Gastroenterology, Tonanomon Hospital, Minato-ku, Tokyo, Japan.

BACKGROUND: Hepatocellular carcinoma (HCC) (liver cancer) occurs in patients with hepatitis C virus-RNA positive chronic liver disease. It is important to prevent HCC with drug administration.

METHODS: A retrospective study was undertaken to evaluate the long term preventive effect of Stronger Neo-Minophagen C (SNMC) on HCC development. SNMC is a Japanese medicine that is commonly administered to patients with chronic hepatitis C to improve the serum alanine aminotransferase (ALT) level. Of 453 patients diagnosed with chronic hepatitis C retrospectively in the study hospital between January 1979 and April 1984, 84 patients (Group A) had been treated with SNMC; SNMC was given at a dose of 100 mL daily for 8 weeks, then 2-7 times a week for 2-16 years (median, 10.1 years). Another group of 109 patients (Group B) could not be treated with SNMC or interferon for a long period of time (median, 9.2 years) and were given other herbal medicine (such as vitamin K). The patients were retrospectively monitored, and the cumulative incidence of HCC and risk factors for HCC were examined.

RESULTS: The 10th-year rates of cumulative HCC incidence for Groups A and B were 7% and 12%, respectively, and the 15th-year rates were 12% and 25%. By Cox regression analysis, the relative risk of HCC incidence in patients not treated with SNMC (Group B) was 2.49 compared with that of patients treated with SNMC (Group A).

CONCLUSIONS: In this study, long term administration of SNMC in the treatment of chronic hepatitis C was effective in preventing liver carcinogenesis (liver cancer).

PMID: 9105008, MUID: 97258837

WHY MILK THISTLE WORKS

From an article: *Inhibition of Kupffer cell functions as an explanation for the hepatoprotective properties of silibinin.* by *Dehmlow C; Erhard J; de Groot H;*Source: *Hepatology* Date of Pub: 1996 Apr Issue: 4 Volume: 23 Pagination: 749-54 Address: *Institut für Physiologische Chemie, Universitätsklinikum, Essen, Germany.*

Silibinin, the main ingredient extracted from the milk thistle *Silybum marianum*, displays liver-protecting properties in acute and chronic liver injury. To further explain how it acts, this investigator studied the effects of silibinin on different

functions of certain rat cells, namely the formation of superoxide anion radical (O₂⁻), nitric oxide, tumor necrosis factor alpha (TNF-alpha), prostaglandin and leukotriene. Production of O₂⁻ and NO nitric oxide were inhibited (stopped) depending on the dose, with a 50 percent inhibitory concentration value around 80 micro mol/L. No effect on TNF-alpha formation was found. Opposite effects were found on the cyclooxygenase and 5-lipoxygenase pathway of arachidonic acid metabolism. Although no influence on prostaglandin formation was observed with silibinin concentrations up to 100 micro mol/L, a strong inhibitory effect on leukotriene formation was found. The amount of silibinin needed to inhibit the formation of this eicosanoid was determined to be 15 micro mol/L. The strong inhibition of leukotriene, formation by silibinin was confirmed in experiments with phagocytic cells isolated from human liver. Therefore, while rather high amounts of silibinin are necessary to diminish free radical formation by activated Kupffer cells, significant inhibition of the 5-lipoxygenase pathway already occurs at silibinin concentrations which are achieved in vivo. Selective inhibition of leukotriene formation by Kupffer cells can at least partly account for the liver-protective properties of silibinin.

PHYTOGENIC AGENTS IN THE THERAPY OF LIVER DISEASE

Author: THABREW MI, UNIV LONDON KINGS COLL, SCH MED & DENT, INST LIVER STUDIES, BESSEMER RD, LONDON SE5 9PJ, ENGLAND

Source: PHYTOTHERAPY RESEARCH 1996 SEP;10(6):461-467

ABSTRACT: Plant extracts have been used by traditional medical practitioners for the treatment of liver disorders for centuries. This article reviews the clinical trials carried out with thirteen plants and their constituents in patients with liver disease, including acute viral hepatitis, chronic viral hepatitis, chronic cholecystitis, alcoholic liver disease and mushroom poisoning. There is considerable scientific evidence that phytogetic agents can have significant beneficial effects on liver dysfunction and the course of liver disease. At present, silymarin has the most proven overall clinical hepatoprotective effects, although glycyrrhizin appears to be more beneficial in chronic viral hepatitis. With the high worldwide incidence of viral hepatitis, further study of isolated phytochemicals is important in relation to their potential antiviral activity against the different hepatitis viruses.

GLUTATHIONE KINETICS IN NORMAL MAN AND IN PATIENTS WITH LIVER CIRRHOSIS

Giampaolo Bianchi, Elisabetta Bugianesi, Michela Ronchi, Andrea Fabbri, Marco Zoli and Giulio Marchesini - Journal of Hepatology Volume 26 - issue 3 - page 606 - 613 EASL

BACKGROUND/AIMS: The dynamics of glutathione in plasma has always been studied by bolus injections. Data are available suggesting that the low plasma levels of cirrhosis are due to decreased production in glutathione-producing tissues, mainly the liver. We aimed to measure the kinetics of glutathione during controlled steady-state conditions, and to determine the reasons for its reduced plasma levels in advanced cirrhosis.

METHODS: The plasma clearance of glutathione was measured in six control subjects and in ten patients with cirrhosis during a 2-step infusion study, producing steady-state levels approximately 5 and 10 times basal values. The plasma disappearance curve after infusion stop was used to determine the apparent volume of distribution and half-life of glutathione, and the estimated basal appearance rate.

RESULTS: The clearance of glutathione did not reject 1st-order kinetics, i.e., it was concentration-independent, and was nearly doubled in cirrhosis. The half-life of exogenous glutathione was not different, whereas the volume of distribution was larger in cirrhosis, in the same range as extracellular water. The endogenous basal appearance rate of glutathione was reduced by 50%, and correlated with liver function, measured by routine and dynamic tests.

CONCLUSIONS: The data confirm that the primary defect responsible for reduced glutathione in liver disease is a reduced production, possibly related to hepatocyte dysfunction and a block along the pathway of methionine metabolism.

ON THE NET

Here's a sampling of net sites. For a more comprehensive review see HepC BC <http://www.geocities.com/HotSprings/5670>

Chinese Medicine on the Net

The Journal of Chinese Medicine (UK) <http://www.pavilion.co.uk/jcm/>

The Foundation for Traditional Chinese Medicine (UK) <http://www.rscm.com/tcm/>

British Medical Acupuncture Society: <http://users.aol.com/acubmas/bmas.html>

The Institute for Traditional Medicine: Chinese, Tibetan, Ayurvedic, Native American and Thai Medicine <http://www.europa.com/~itm/>

History of Traditional Chinese Medicine -Contains links to articles on the Internet concerning the history of TCM, philosophy, alchemy, Buddhism, Feng Shui, etc. <http://www.mic.ki.se/China.html>

Acupuncture et Médecine Chinoise (Quebec site in French): <http://www.cam.org/~sinomed/>
Acupuncture.com: A Comprehensive Guide to Chinese Therapy <http://www.acupuncture.com/index.htm>

Herbal Sites on the Net

The Herb Society (UK) <http://sunsite.unc.edu/herbmed/HerbSociety/>

The Herb Net: Where to buy herbs and lots more info. <http://www.herbnet.com/shoppe.html>

The Herbal Resources Homepage <http://www.herbsinfo.com/>

darmorr@uniserve.com HepC BC

NATURAL INTERFERON BOOSTERS

by Zoltan P. Rona MD, MSc http://www.naturallink.com/homepages/zoltan_rona/interferon/index.html

Interferon is a substance produced by the body's white cells to fight infections, cancer, allergies and toxic chemical poisoning. Interferon can be made artificially and injected for some cancers and viral infections like hepatitis C. Studies indicate that many natural substances can activate the body's own production of interferon. Some better known natural interferon boosters are:

- Astragalus**: a Chinese herb that enhances the antibody reaction to foreign invaders of all types including cancer.
- Boneset**: a native American Indian herb with antiseptic, anti-viral properties used for the treatment of colds and flus, coughs, fevers, indigestion and pain.
- Chlorophyll**: a plant pigment which can be found in a long list of green leafy vegetables and algae like spirulina, chlorella and barley green
- Coenzyme Q10**: an antioxidant involved in the electron transport chain needed for all energy dependent processes in the body. CoQ10 increases helper T-cells and reduces infection risk.
- Echinacea**: the most popular herb in North America used as a treatment for toothaches, bites or stings and all types of infections.
- Ginkgo**: a potent central nervous system antioxidant for the treatment of circulation disorders, memory problems, high blood pressure, depression, tinnitus and immune system disorders.
- Licorice**: an anti-inflammatory and anti-allergic herb used to boost energy, treat respiratory tract infections as well as female disorders, ulcers, adrenal insufficiency and congestion.
- Melatonin**: a hormone produced by the pineal gland with strong antioxidant and immune system boosting properties.
- Milk Thistle** (Silymarin): a herb most commonly recommended as a liver cleanser and complementary medical treatment for hepatitis.
- Medicinal Mushrooms**: Reishi, Maitake, Shiitake, Kombucha and others stimulate many aspects of the immune system including the production of interferon.
- Siberian Ginseng**: stimulates T-cell and B-cell activity, energy, libido, body fat burning and many stress-related conditions.
- Vitamin C** and bioflavonoids, especially proanthocyanidins (pycnogenols) like grape seed extract, pine bark extract and bilberry, quercetin, hesperidin and catechin are powerful antioxidants.

There are over a dozen more natural interferon boosters available at most health food stores and pharmacies alone or in combination. For more information about safe and effective natural ways to boost immunity, see your health care practitioner.

HEP-SEA FOR HEP C: ROBERTA MCWILLIAM FINDS RELIEF FROM SOME SYMPTOMS

as told to Darlene Morrow

Hep-Sea is a food supplement that contains coarse ground shark cartilage, shark flesh and kelp. Larry Brundritt, its inventor, suffers from Hepatitis C and concocted the supplement through trial and error experimentation. He claims to be free of symptoms and Hep C. In January of this year he placed an advertisement in the *Vancouver Sun*.

Roberta McWilliam of Vancouver answered that ad. She decided to try the Hep-Sea for two months to see what happened. She found relief from the leg cramps, aches and pains, and the fatigue, most notably. The second order of Hep-Sea was not offered at the discount, but Roberta has decided to continue with the therapy despite the increased cost. She hopes that other symptoms may also be relieved.

Hep-Sea brand Sea-Fibre can be found in many health food outlets. The suggested retail is \$69.95 Canadian Funds. For society members, they may ship mail order direct a two month supply (180 capsules) for \$50.00 plus appl. taxes and postage. 1-250-954-3776 Order Line 24hr., 365 days Do not take or use extreme caution if you know you have an allergy to seafood, iodine, or have had a transplanted organ.

The hepcBC.bull newsletter in no way endorses this, or any other, product, but would like to provide information to its readers.