Your Monthly Update

Dear Colleague

Welcome to the February 2009 newsletter from Pure Bio Ltd.

Did you know:

Researchers at the Royal Hampshire County Hospital admitted in a study published in the Journal of Hospital Infection that Tea Tree treatment was more effective than chlorhexidrine or silver sulfadiazine at clearing superficial skin sites and skin lesions. It was concluded that "tea tree preparations could be considered in regimens for eradication of MRSA carriage".

The chosen topic for this month is:

Ooedema

Protocol Summary

| Ranking | Nutritional Supplements | Botanical Medicine |
|-----------|--|--|
| Primary | Flavonoids (courmarin, hydroxyethylrutosides) | |
| Secondary | Flavonoids (diosmin and hesperidin combination) Selenium (for lymphoedema) | |
| Other | Flavonoids (quercitin) | Cleavers Corn silk Dandelion (leaves) Goldenrod Horse chestnut Horsetail Juniper |

Primary – Reliable and relatively consistent scientific data showing a substantial health benefit.

Secondary – Contradictory, insufficient, or preliminary studies suggesting a health benefit or minimal health benefit.

Other – An herb is primarily supported by traditional use, or the herb or supplement has little scientific support and/or minimal health benefit.

Symptoms

Oedema is swelling due to an infiltration of fluid into the tissues. If it occurs in one specific area, it can cause the nearby skin to become taut and shiny and the muscles to become achy. A noticeable weight gain of several pounds can occur. Oedema is

most common around the feet and ankles. However, bloating from fluid retention usually affects the whole body.

Causes of Oedema

There are innumerable predisposing factors that can cause oedema:

Following an injury, inflammation or allergies.

- Ankle-swelling, bloating and weight-gain symptoms of oedema during PMS are the result of hormonal imbalances, which can also occur secondary to the contraceptive pill.
- Certain high blood pressure medications (beta-adrenergic blockers) can cause oedema, as can protein deficiency or imbalance, varicose veins, obesity, liver disease, thyroid disease, adrenal problems, various forms of heart disease, pancreatitis and kidney disorders.
- Feet and ankle swelling are often caused by a weak venous system that has been overburdened from standing or even sitting for too long.
- Tissues are more likely to swell in the heat.
- Fluid retention which develops in the legs and ankles at the end of the day and disappears by morning could be a sign of heart disease.
- Persistent oedema, which begins with puffiness in the eyelids and face, can be the result of water retention due to kidney disease. Although puffy lids are often linked to kidney problems, many persons have a tendency for swollen lids, especially in the morning upon waking, without any signs of illness.
- In cases of malnutrition or liver cirrhosis, a severe lack of protein causes oedema in the abdomen. Protein is necessary to hold water in the bloodstream, among its many other functions.

A significant number of people suffering from oedema of unknown origin have hidden or delayed food allergies. Many women are put on diuretics for years to control their tendency for fluid retention. Weight fluctuations are very often associated with fluid retention problems and are usually indicators of unsuspected food allergies. Changing the diet to avoid or rotate the allergic foods causes the elimination of the fluid excess and may significantly help those with chronic weight control problems. Dairy products, wheat and other grains are the most common offenders, but any food can produce fluid retention in susceptible individuals.

Dietary Modification

High salt intake should be avoided, as it tends to lead to water retention and may worsen oedema in some people. A controlled trial found that a low-salt diet (less than 2,100 mg sodium per day) resulted in reduced water retention after two months in a group of women with unexplained oedema. A plentiful supply of raw fruits and vegetables is also recommended, as they are low in sodium and high in potassium.

Sufficient water intake should be maintained. Oedema can result from too little water in the body due to inadequate liquid intake or excessive intake of protein-rich foods, such as meat, fish and cheese, which take large quantities of water to digest. The body compensates for the imbalance by retaining water.

Whole grains and nutritional yeast are good sources of B vitamins, which have been shown to be effective in reducing water retention. Restrict the intake of sugar and white-flour products, as these refined carbohydrates deplete the body of B vitamins.

Juniper berries are an effective remedy for oedema due to a sluggish metabolism as they stimulate kidney activity, thereby increasing water elimination.

 A traditional remedy for swollen ankles is adzuki beans, boiled in water and taken either as a soup or a drink twice daily. Another folk remedy for swollen ankles and legs is potato peelings (from organically grown potatoes) simmered

- in two cups of water for fifteen minutes and strained. Take two tablespoons in a glass of water four times daily for fourteen days.
- For a more extreme remedy, the three-day onion diet could be recommended: juice one pound of fresh raw onions and mix with three ounces unpasteurized honey and four cups of white wine. Take one tablespoon four times daily to promote fluid elimination.

Lifestyle Modification

If the oedema is affecting one limb, the limb should be kept elevated whenever possible. This allows fluid to drain more effectively from the congested area. To decrease fluid build-up in the legs, people should avoid sitting or standing for long periods of time without moving.

Other therapies

Commonly, treatment consists of managing the underlying condition, which may include inadequate nutrition; liver, heart, and kidney disease; or obstruction of blood or lymph flow. In some cases, a salt-restricted diet may be recommended.

Nutritional Supplement Treatment Options

<u>Vitamin B6 (as P5P)</u> - Oedema due to heart or kidney problems should be examined. Water retention is often caused by retaining too much sodium, which can be compensated by increasing calcium and magnesium intake. Vitamin B6 is effective in ridding the tissues of water, especially if caused by PMS (best taken in the form of P5P. Recommended dosage is 50mg for ten days to two weeks before the period only, in order to prevent imbalances).

<u>Vitamin C (ascorbic acid)</u> with bioflavonoids helps stabilize the cell walls if sluggish lymphatic vessels or veins are at fault. Vitamin C also assists the adrenals in controlling body fluids.

Several double-blind trials have found that 400 mg per day of coumarin, a flavonoid found in a variety of herbs, can improve many types of oedema, including lymphoedema after surgery.

A group of semi-synthetic flavonoids, known as hydroxyethylrutosides are also beneficial for some types of oedema. One double-blind trial found that 2 grams per day of hydroxyethylrutosides reduced ankle and foot oedema in people with venous disorders after four weeks. Another double-blind trial found that 3 grams per day of hydroxyethylrutosides significantly reduced lymphoedema of the arm or leg and lessened the associated uncomfortable symptoms.

A combination of the flavonoids diosmin (900 mg per day) and hes-peridin (100 mg per day) has been investigated for the treatment of a variety of venous circulation disorders. However, in a double-blind trial, this combination was not effective for lymphoedema caused by breast cancer treatments.

In a preliminary study, individuals with lymphoedema of the arm or head-and-neck region were treated with approximately 230 mcg of <u>selenium</u> per day, in the form of sodium selenite, for four to six weeks. A quality-of-life assessment showed an improvement of 59%, and the circumference of the oedematous arm was reduced in 10 of 12 cases.

Because coumarin, hydroxyethylrutosides, and diosmin are not widely available in the UK, other flavonoids, such as <u>quercetin</u>, rutin (<u>Venobalance</u> PE), or anthocyanosides (from <u>bilberry</u>), have been substituted by practitioners in an attempt to obtain similar benefits. In one study, quercetin in amounts of 30–50 mg per day corrected abnormal capillary permeability - an effect that might improve oedema. A similar effect has been

reported with rutin at 20 mg TID. Recommended dosage for bilberry is 80–160 mg of a standardized extract TID.

Botanical Treatment Options

A double-blind trial found that a formula containing butcher's broom extract (<u>Venobalance</u>), the flavonoid <u>hesperidin</u>, and <u>vitamin C</u> was superior to placebo for reducing lymphoedema. The amount of butcher's broom extract typically used is 150 mg BID or TID.

Herbs that stimulate the kidneys were traditionally used to reduce oedema. Goldenrod (Solidago candensis) is considered one of the strongest herbal diuretics. Animal studies show, at very high amounts (2 g/kg body weight), that <u>dandelion</u> leaves possess diuretic effects that may be comparable to the prescription diuretic furosemide. Corn silk (Zea mays) (<u>Venobalance</u>) has also long been used as a diuretic, though a human study did not find that it increased urine output.

Aescin, isolated from horse chestnut seed, has been shown to effectively reduce postsurgical oedema in preliminary trials.

Horsetail has a diuretic (urine flow increasing) action that accounts for its traditional use in reducing mild oedema. Although there is no clinical research that yet supports its use for people with oedema, the German government has approved horsetail for this use. The volatile oils in <u>juniper</u> cause an increase in urine volume and in this way can theoretically lessen oedema. (Do not take juniper berries in the presence of kidney inflammation).

Drink teas and juices of diuretic herbs to promote urination, such as <u>parsley</u>, yarrow, <u>stinging nettle</u>, birch leaves and watercress. For tea, add 1 tsp. of herbs to 1 cup of boiling water or take 1 tbsp. of juice daily.

Homeopathy

Consult an experienced homeopath for constitutional treatment. The following remedies offer short-term relief of symptoms. Take the 6c strength, TID, for up to two weeks.

Take Arsenicum for swollen feet and ankles, chilliness, restlessness, and a frequent thirst for small quantities of hot beverages.

Apis is used for swelling with inflammation and stinging pains that are made worse by heat and / or light pressure.

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