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Immunologic Disorders: The Response of Herbal Medicine.
Keith Stelling M.N.I.M.H.

Diseases involving a disturbance of the immune system have become major stumbling blocks to twentieth century medicine. They are on the increase, both in numbers of people affected, and in the proliferation of previously "un-described" syndromes. They destroy organs, glands, joints, and even the nervous system. And the chronic, attenuated course of most of these conditions takes a devastating toll in suffering and incapacity.

Rheumatoid arthritis, ulcerative colitis, and psoriasis are common. But there are many other diseases either totally caused by immunologic imbalance or having an auto-immune element in their aetiology. Crohn's disease, multiple sclerosis, chronic hepatitis, systemia lupus erthymatosis, juvenile onset diabetis mellitus, polymyalgia rheumatica, glomerulonephritis and even cancer are

becoming more widespread.

They all involve over-activity of the immune system - the body's defensive network. Somehow its normal reaction becomes confused. The body is no longer capable of distinguishing an invading foreign protein (e.g a bacterium or a virus) from its own tissues. Most cells are triggered and histamine is released; macrophages engulf large numbers of healthy cells and the inflammatory response becomes chronic - unable to be wound down or "resolved". Usually chronic pain accompanies the process and the accumulation of debris and toxins makes the whole situation even worse.

Closely related to this situation is the opposite one: acquired immune deficiency syndrome (AIDS), in which the reticulo-endothelial system doesn't over-react, but simply fails to react at all. It becomes incapable of mounting an adequate response to invading organisms. Consequently the patient succumbs to "opportunistic" infections - relatively benign bacteria which would normally cause the body little trouble. In full-blown AIDS, there follows generalized lymphadenopathy or a wasting disease that pursues its relentless, progressive, downhill course, usually ending in death.

However, there are many degrees of immune deficiency quite apart from AIDS. Repeated infections and constant colds that cannot be shaken off, for example, often indicated an immune response that is below par.

How does the body come to lose sight of its sense of proportion in these matters? What causes the system of macrophages and lymphocytes, normally designed to protect us, either to fail to operate at all, or to over-react to such an extent that we are literally eaten alive by our own cells?

Scientific research on the subject has been prolific in recent years. There is hardly a month that passes when even the Scientific American does not publish an article on some new "breakthrough" in our understanding of the immune response. Amazing exploratory techniques using the electron microscope and genetic engineering have penetrated the darkest recesses of our tissues and they have produced a whole new language so complex that it can be followed by few other than the specialized technologist. However, it is doubtful whether any of these efforts have brought us any greater insight as to our treatment of the pathologies. Perhaps we are now aware that the whole system depends upon a balanced coding of "helper T cells" and "suppressor T cells" in the liver and spleen and a series of delicate electro-chemical bio-feedback mechanisms whose elegance and intelligence staggers the human mind.

But we seem to have done little with our knowledge to prevent environmental causes. The following factors have for some time been generally acknowledged to contribute to compromise of the immune system. Their proliferation within the environment parallels an increase in related diseases over the last 40 years:

RADIATION in all its forms has been directly linked to lowering immune response by destroying the immune system: X-ray (medical and dental), radiotherapy, and atomic radiation from mounting stockpiles of nuclear waste around reactors [1]. Similarly, increased exposure to ultraviolet rays of the sun through destruction of the ozone layer by aerosol sprays, soft foams, egg cartons, coolants in refrigerators and halones used in industrial/commercial fire extinguishers. (Ozone Protection Campaign - 16-53 Queen Street, Ottawa K1P 5C5 (613) 230-3352).

CORTICOSTEROIDS suppress not only inflammation but also the normal immune response as well. Ultimately, after prolonged use, they leave the body incapable of mounting its own defensive action. Of

particular concern is the widespread and indiscriminate use of these powerful drugs in conditions where their effectiveness is, to say the least, minimal - e.g. skin problems. Even extended and heavy use by asthma patients in the form of inhalants is not without its consequences. (Skin problems and asthma respond excellently to herbal treatment, thus avoiding these dangerous drugs).

ANTIBIOTICS too widely used medically and used without any control whatsoever by farmers in meat production, inevitably present themselves in the human liver for detoxification-- increasing its already heavy burden and upsetting the fragile balance necessary for natural immunity.

SURGICAL INTERVENTION Removal of tonsils or appendix (both lymphatic tissue).

IMMUNIZATION programmes are also now being questioned and in many cases considered to compromise immunity.

ENVIRONMENTAL TOXINS in the form of heavy metals and industrial chemicals in our water supply, lethal chemicals sprayed onto our crops, fungicides on our fruit and vegetables, weed killers on our lawns [2] and all the synthetic preservative, artificial colouring, emulsifiers and stabilizers that form part of most commercially prepared food, present on-going and dangerous challenges to the immune system. One suspects that some so-called "food-allergies" may in fact be reactions to these toxins - (e.g. allergies to wheat). [3]

REFINED CARBOHYDRATES another artificial component of the western diet and especially white sugar and white flour have now been directly associated with ulcerative colitis, Crohn's disease, and cancer. [4] Herbalists have long noticed that patients suffering

from rheumatoid arthritis invariably improve when these unnatural substances are removed from their diet.

SEDENTARY LIFESTYLE that neglects daily adequate exercise leads to stagnation of the body's circulatory systems. This is particularly true of the lymphatic and venous systems which require muscle contraction to promote flow and subsequent removal of metabolic wastes.

POSSIBLE HEREDITARY FACTORS can be kept in mind and extra care taken to compensate for them.

STRESS is known to lower the efficiency of all body functions, including the immune response. It can be effectively managed by holistic herbal treatment.

It is clearly evident that compromise of human immunity is closely linked to environmental insult. The seriousness of the situation is perfectly obvious: our destruction of the environment has consequences in the extinction of many forms of life on the planet - chief among them, human kind. It must therefore be emphasized that any holistic approach to healing immunologic disorders can be no more than symptomatic unless these more general considerations are acted upon.

The herbalist looks first to the liver. Among its many other functions, including detoxification the liver has an important role in regulating immunological activity in the body. "Many practitioners suspect reduced liver function in many diseases of immunological disturbance, especially the auto-immune diseases".
[5]

Herbal medicine uses many plants specific for the liver. *Taraxacum officinale* Radix (dandelion root) contains a bitter, taraxacin

which acts to restore digestion. But it also contains a number of enzymatic substances which activate secretions in both liver and kidney. Bitters stimulate the flow through each hepatocyte from blood to bile, effectively improving the self cleansing mechanism of the liver. Dandelion root is completely non-toxic and gently restorative to liver function. *Taraxacum officinale* Folia (dandelion leaf) expels uric acid and every other deposit from the tissues, including heavy metals. A monograph in the French Pharmaceutical Codex of July 1980 indicated a certain anti-viral activity in the leaf as well.

Carduus marianus (milk-thistle or *syllibum*) works as a hepatic restorative. It also activates oxygen metabolism in the cells and increases the amount of A.T.P. (the common currency of energy within the body) available to the tissues. *Cynara scolymus* (artichoke juice) possesses remarkable detoxifying qualities, according to the French Phyto-therapist, R.L.Nicot. It stimulates liver cell regeneration and notably augments the anti-toxic function of the liver, according to Mills, by augmenting the production of co-enzymes and promoting glycuco-conjugation of bilirubin, folliculin, and many other products of endogenous and exogenous origin.

Clinical experience, in fact, shows that the herbs most useful in treating immunologic disorders are the bitters, and there are many of them, each specifically designed, so it seems, for specific tasks. This approach has proved very helpful in the treatment of arthritis, skin disorders including psoriasis, along with anti-inflammatories and circulatory stimulants. But bitters have been shown to have an important effect in stimulating immune activity as well.

In the lowered immune response, *Echinacea angustifolia* (purple coneflower) has proved its worth. *Echinacea* is fungistatic,

antibiotic, antimicrobial and bacteriostatic in its activity. As a tumour inhibitor, it causes regression in several tumour systems in humans and has been demonstrated to be inhibitory to lymphocytic leukaemia and Walker Carcinoma-sarcoma "256" and "388". But it is chiefly used as stimulant to the immune system and has been shown by carbon clearance testing to increase the mitosis rate of "T" lymphocytes and to play a role in the coding of "T" lymphocytes.

It is often used in conjunction with *Baptisia tinctoria* (wild indigo) by professional herbalists. This plant is viro-static, *Baptisia* inhibits multiplication of the virus by blocking the receptor sites on the cell membrane so that the virus can't invade the cell. It is advocated by the Anglo-Dutch Herbalist Hein Zeylstra for every viral infection and disease and by the British Herbal Pharmacopoeia specifically for lymphadenitis and infections for the upper respiratory tract - both problems in AIDS. A.W. Priest recommends *Baptisia* after typhoid inoculation. But it is a herb that must be used by the qualified medical herbalist only since the very minimal dose level is crucial and large doses can be emetic.

Another herb with great influence over the lymphatic system is *Galium aparine* (cleavers). Here is a cleansing agent for the lymphatic system. It has been used in carcinoma, T.B. and malignancy of the lymphatic system (Lymphadenoma). Priest notes that *Galium* corrects the body's inability to pass normal catabolic wastes.

It is likely also that *Calendula officinalis* (English marigold) may have a place in the treatment. It has a long record of use specifically for cancer of the lymphatic system and is recommended by the B.H.P. for hard inflamed malignant nodes, including lymphadenitis or Hodgkin's disease. Its activity had been demonstrated in the prevention of metastases. It is also an

important anti-inflammatory, anti-bacterial agent especially against staphylococcus and streptococcus as well as being the best anti-fungal agent we have, even among chemical pharmaceuticals. Beet root juice is an old stand-by to stimulate the immune system. And according to recent research, Vitamins E,A,C, (with bioflavonoids) and zinc are helpful in protecting against radiation damage. Vitamin E has been shown to reduce D.N.A. damage. Some fibres in kelps and seaweeds can clear radiation from the system, especially in conjunction with vitamin C. Pectin, calcium, and magnesium can also bind to a lesser degree with radioactive ions, given the presence of vitamin C with bioflavonoids. [6]

But a holistic approach will also involve correction of sluggish circulation (responsible for toxic accumulation), institution of a regime of adequate exercise, a compete wholefood diet, and balancing in the psychological/spiritual herbal restoratives to overcome the effect of stress and anxiety in lowering resistance.

Understandably, diseases of immunologic aetiology are serious health problems and not for the amateur to treat. It is crucial that anyone thought to be suffering from one of them should first consult his or her family doctor to obtain an accurate diagnosis. [7] Because of the nature of these illnesses, drug treatment is often undesirable for many patients. It is then time to seek a consultation with a qualified medical herbalist who will be able to use his training and experience to determine which plants will be most effective in the particular case. Many herbalists prefer to work in consultation with the family doctor to ensure that the best diagnostic techniques are always available and progress can be accurately monitored. But it is inadvisable to waste valuable time with self-medication and dangerous experimentation. In the hands of the skilled herbalist, clinical records have shown that there is hope for permanent relief from many auto-immune disorders.

However our attention must still be focused upon eliminating the real causes of these peculiarly 20th century diseases with a commitment to cleaning up the environmental toxins that are making us sick.

As Dr. Dorothy Marshall, Executive Director of the Canadian College of Natural Healing in Ottawa has written:

"The problems are real. They have come to be serious and they could be disastrous if public interest doesn't become public action. We are facing a challenge as great as anything that is recorded in history. There can never be too much effort put towards its solution. Get involved. Help to bring back the future."

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REFERENCES

[1] The most recent British research has confirmed that the incidence of cancer is greater than expected around the country's nuclear reactors. Researcher discovered a belt of high leukaemia death rates stretching up to 20 miles from the plant near Amersham. A high rate of liver cancers was found around Bradwell, Wylfa, Hinkley, and Dungeness. The report was produced and published by H.M. Government Office of Population Census and Surveys. (From The New Scientist 1987, no 1549, p.22)

[2] One such pesticide, malathion, has been shown to cause cardiac arrest respiratory failure and inflammation of the brain and spinal

cord when absorbed through the skin. It has also been associated with birth defects and inhibition of liver function in animals. Flu-like symptoms are among the commonest signs of exposure to the chemical which originally was developed as a nerve gas and warfare agent. Similarly, 2,4-D, one of the common weed killers used by gardeners, was an ingredient of Agent Orange, used in Viet Nam as a defoliant and identified by the 1971 W.H.O. report as a carcinogen. See Option, May, 1988, published by Health Action Network Society, #11-3856 Sunset Street, Burnaby, British Columbia, B5G 1T3.

[3] An Italian study has shown that tonsillectomy can predispose children to a variety of disorders apparently caused by a drop in production of secretory IgA. Deficiencies are associated with gastro-intestinal disorders and auto-immune disease. The Italians say that IgA deficiency has been associated with cow's milk allergy. Also it has been shown that when IgA is deficient, food antigens which are normally excluded from the gut mucosa penetrate it, making individuals sensitive to particular foods. Doctor, 1987, 17 (8) p.35.

[4] See Sugar: Health Food or Poison by David Rowland, PhD, RNC, Nutrition News, March/April 1987, p4-5.

[5] Simon Y. Mills, M.A., M.N.I.M.H., President of the National Institute of Medical Herbalists, The Dictionary of Modern Herbalism. Thorsons, Wellingborough and New York: 1985, p.30.

[6] ION, Vol.1, No.7, March 1987.

[7] Preferably a doctor with a holistic orientation. Information about the Canadian Holistic Medical Association, a group of holistically-orientated M.D.'s and supporting lay members is available from: CHMA, Box 100-260, 2 Bloor St. W., Toronto, Ont.,

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