How bovine tracheal cartilage stimulates the immune system

Paradoxically, bovine cartilage stimulates the immune system in resisting cancer and viruses, but suppresses it in rheumatoid diseases. Thus it acts as a “normaliser”. According to Dr. Prudden, “bovine cartilage closely resembles foetal mesenchyme, the primordial tissue from which muscle, bone, tendons, ligaments, skin, fat and bone marrow (the heart of the immune system) all develop.” “The cartilage”, he adds, “contains numerous powerful molecular biodirectors. These have a potent normalizing effect on the multiple chemical and structural abnormalities of cancer cells.

Initial laboratory work was done to study the effects of bovine cartilage on herpes viruses. When herpes viral cultures were exposed to bovine cartilage, however, absolutely no effect was observed! This meant that the powerful clinical effects observed were due to a stimulation of the immune system, not to the agent itself. Once the impact of bovine cartilage on herpes became evident, the effort to figure out how it worked began.

Another important study showed that bovine cartilage also had a direct impact on cancer tissue cultures. The study was conducted by Brian G.M. Durie, M.D., then with the Department of Medicine at the University of Arizona. It demonstrated that bovine cartilage had a direct anti-mitotic effect on human ovarian, pancreatic and colon cancers. In other words, it inhibited cell division in several kinds of cancer. However, bovine cartilage demonstrated a relatively slow clinical response time in patients.

This suggests bovine cartilage’s effect may be primarily cytostatic at clinical concentrations, (Cytostatic activity is defined as the slowing of the replication of new cells.) Since tumours have a natural high cell death rate in vitro (in artificial environments) even without the intervention of the immune system, a substance which slows cell division and thus prevents tumour growth could eventually cause curative eradication of cancer in a host.

Although most of the active molecular components of bovine cartilage have not been identified, Dr. Prudden and others consider that the mechanism of action is due primarily to the active mucopolysaccharides (large sugar molecules) in bovine cartilage.

These mucopolysaccharides are thought to act on the tumour cell membrane to block mitosis (cell division). In addition, Dr. Johnson and Dr. Prudden found there was a general activation of and increase in the macrophages (which “devour” foreign cells), and an activation of cytotoxic T cells and stimulation of B cells. An increase in the tumour of B cells produces clinical rises in immunoglobulins A, G and M, resulting in an overall increase in anti-mitotic activity. Usually, but not invariably, the “natural killer” (NK) cells also increase.

The impact on the size of cancer cells (which are generally much larger than normal cells) can be measured by a scanning electron microscope. As a result of its immuno-stimulatory activity, bovine cartilage reduces the size of aberrant cells. With bovine cartilage therapy, the malignant cells gradually decrease to the size of healthy cells. Thus, it is a complex array of effects that produces the overall anti-cancer activity.

The process in which bovine cartilage stimulates the immune system is markedly different from the approach taken by standard oncology. While chemotherapy and radiation sometimes produce dramatic results, their objective has been primarily to kill cancer cells directly at great expense to the patient’s immune system. Because of the limited success of chemotherapy and radiation, the drug
industry’s attention has recently been drawn to immunotherapy. However, chemical stimulation of the immune system has been notably unsuccessful. Agents like Interferon (isolated as early as 1956), Interleukins and Tumour Necrosis Factor (TNF) have been identified and isolated. However, when large amounts of any of these agents are introduced into the immune system, the critical balance of the immune system is disrupted. The results have been generally ineffective and toxic to the point of occasional fatalities.

Ralph Moss, Ph.D., author of Cancer Therapy, The Independent Consumer’s Guide and the Cancer Industry, an expert on non-toxic cancer treatments and a member of the Board of Directors of the Office of Alternative Medicine at the National Institute of Health (USA), compares the wholesale introduction of a specific immunological stimulant to “replacing the violin section with twice the number of trumpets in a finely tuned philharmonic orchestra.” Simply put, it is unbalanced overkill. “Conversely, bovine tracheal cartilage selectively simulates the body’s immune system and normalises aberrant cells,” comments Dr. Prudden.