The Arthritis Trust

Dedicated to Eradicating Rheumatoid Disease From the Earth

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STEROLS/STEROLINS:

THE NATURAL, NONTOXIC IMMUNO-MODULATORS AND THEIR ROLE IN THE CONTROL OF RHEUMATOID ARTHRITIS

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INTRODUCTION:

It is a well known fact that all auto-immune diseases, of which Rheumatoid arthritis (RA) forms a large portion, are the result of the malfunction of the body's immune system which is activated by an unknown agent to attack and destroy the host's tissues. Many reasons for the dysfunction of the immune system have been postulated by medical researchers, but the standard approach to the treatment of such patients has been to suppress the immune response with immunosuppressive drugs, notwithstanding their many damaging side effects. Other treatments offered are merely palliative and designed to relieve pain and symptoms linked to the inflammatory process.

Recent research conducted on the sterols and sterolins (plant fats) by our group at Tygerberg Hospital/University of Stellenbosch Medical Faculty and published in the *International Journal of Immunopharmacology*, is providing an entirely new medical approach to the treatment of auto-immune diseases and other chronic diseases which only manifest themselves when the immune system of afflicted individuals is at cause. International medical and scientific interest in this breakthrough has been overwhelming and a number of clinical trials using sterols and sterolins for various conditions are far progressed and more are planned in the near future.

With the millions of people suffering from RA and other auto-immune diseases in mind, any new information coming to light will be published at the earliest opportunity.

The following is a summary of how the immune system functions under a normal response and how during a pathological process, the same system can cause the tissue damage seen in various diseases. A normal healthy immune system relies on:

- B cells: these produce antibodies (proteins) which destroy invading pathogens such as bacteria, viruses, parasites and other foreign proteins before they have entered the cells of the host.
- T cells are the cells which control and regulate the immune response.

These are divided into either CD4 positive (or also called the T-helper cell) or, CD8 positive (or called the T suppressor or cytotoxic cell). To complicate the matter, there have been 2 types of T helper cells described. The so-called T_{H1} CD4 cells which produce IL2 (Interleukin 2) and Gamma Interferon (IFN-γ) and the T_{H2} CD4 cells release IL4, IL6 and IL10 which enhance the activity of B cells to produce antibodies. In fact, it is known that should the activity of T_{HI} CD4 cells be defective, many chronic diseases typified by an over-activity of antibody production ensue.

On the other hand, the CD8 positive cells are activated by the T_{H1} lymphokines to become killer/cytotoxic cells in that they kill the host cells which harbor the pathogen: this is an escape mechanism utilized by certain organisms in an attempt to evade the initial response mounted by the antibodies produced by the B cells. This is due to the fact that, once inside the host cell, the pathogens are inaccessible to the action of antibodies. Hence, the cellular mechanism typified by the CD8 T cells evolved as a result of this escape mechanism employed by the pathogens in question.

The immune system is finely tuned to adapt to changes which can be induced either when a virus or bacterium invades the host or to recognize changes that are associated with the development of malignant characteristics. It therefore stands to reason that when the T_{H1} arm of the T cells

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ARTHRITIS/RHEUMATISM: THE FORGOTTEN PATIENTS

The Rheumatic Disease Patient in the Doctors Office

By Paul A. Goldberg, M.P.H., D.C.

PART TWO (of 4 parts)

Contrary to the current pattern in doctors' offices of seeing the patient on an ongoing lifetime basis to try to control symptoms, the ethical and well versed doctors goal should be to restore the patient to good health. I dislike the idea that patients should become "life-long patients" if that means receiving palliative care for an indefinite period of time. *It should be our goal to help patients return to good health and have the knowledge to stay in good health without becoming doctor dependent.* This can be a challenge with the Rheumatic Disease Patient.

Paul A. Goldberg, M.P.H., D.C.

The R.D.(Rheumatic Disease) patient has often been to numerous offices. Their history generally reveals they have been to the General Medical Physician, the Internist, the Medical Rheumatologist, one or more Doctors of Chiropractic, and a few assorted others such as "nutritionists" (a term with no legal standing), naturopaths, iridologists, massage therapists, etc. They generally, report that their doctor shopping has revealed little more than a litany of bills, despair, and hopelessness.

Taking a good history of drug usage is important. Generally, the longer the patient has been ill, and the more drugs that have been taken, the more difficult will be the patients return to health. Use of corticosteroids, gold shots, N.S.A.I.D.'s [non-steroidal anti-inflammatory drugs], etc, increase intestinal permeability and perpetuate R.D.[1] NSAID'S have a full spectrum of potential toxic effects directed to

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wards the gastrointestinal tract, the central nervous system, kidney, skin and liver.[2] Their effects on the G.I. tract are well documented, causing gastric irritation and exacerbation of gastric ulcer.[3] The G.I. tracts of patients with R.D. are likely to be more penetrable to food antigens.[4,5] Immunosuppressant agents such as methotrexate are highly toxic. The hazards of corticosteroid usage are clear.

Numerous patients also have taken "herbal remedies" for their R.D. Many of these contain drug-like constituents. Withdrawal may result in uncomfortable symptoms. Chinese herbal remedies (known as chuifong toukuwan) have been known to contain cortiocosteroids [6]. Numerous other remedies are marketed towards the arthritic/rheumatic patient including plant extracts, sitting in caves for radiation exposure, juice tablets, and other pills and potions, that do not address etiological factors. Being "natural" or "herbal" does not guarantee safety. Many drugs on the market are herbally derived. Arsenic and mercury are "natural", but few would advocate taking them for good health!

With such a variety of both conventional and non-conventional treatments that the R.D. patient becomes exposed to, the question should be asked:

Is this product or service addressing the cause, (etiology) of the problem?

The answer, no matter how natural the product may be will almost always be no!

GENERAL GUIDELINES FOR THE R.D. PATIENT

The initial workup of the R.D. patient is similar to that of other patients and should include :

1. Case History

The patient often has a long story to tell. The doctor should note drug usage, past and present. What types of doctors has the patient seen? What was done with what results? What are the current symptoms? How is the patient's digestion? Are there episodes of digestive distress? How frequently do the bowels move? Is there constipation and/or diarrhea with either blood and/or mucus? Digestive problems warrant attention be given to the G.I. tract as a potential source of the patients disease. *Symptoms should be taken seriously.* To tell a patient that his/her symptoms are unimportant, is insensitive to one who may have suffered for years! Symptoms are the nervous system's way of talking. Symptoms may not be of primary importance to the doctor, but they do relay information to a competent practitioner and they are important to the patient.

Major Complaints

There may not be joint/muscle pains in some patients in the early stages. Patients often complain of fatigue, depression, maldigestion, headaches, skin problems etc., revealing poor overall health. For the patient with. fatigue (common), when the fatigue dissipates, so often will the rheumatic complaints.

II. Hygienic Review of the Patient

Rheumatic disease affects the body as a whole, and improvement depends on increasing vitality. The doctor should interview the R.D. patient as to hygienic factors:

A. Sleep - Is the patient obtaining adequate sleep? Keeping late hours depresses immunity. For healing to take place, adequate rest and sleep is essential. This is a factor often overlooked by both doctor and patient. The R.D. patient is often very exhausted and in bad need of long hours of sleep and rest. A period at a health spa/natural hygiene institute where extended sleep and rest may be obtained without disruption will serve most patients very well to allow their bodies time to begin the healing process.

B. Diet- Is the patient diet conscious? Do they ingest unprocessed vegetables, whole grains, nuts, fruits, moderate animal proteins, etc.? If they eat healthy foods, do they also have good habits e.g. not overeating, chewing their food well, eating in peaceful surroundings, etc. Is their digestion sound ? Do they have foods that they eat repeatedly (potential allergy)?

C. Toxic Habits - Patient usage of drugs, alcohol, tobacco, fast foods, coffee and other stimulants should be recorded and counseling given.

D. Sunshine - Does the patient receive adequate amounts of natural sunlight? The warm rays of the sun upon a tired ennervated body help to bring life back to it just as the rays allow a plant to grow.

E. Fresh Air - Does the patient receive fresh air on a regular basis, or are they breathing in the polluted air of the city?

F) Environment - Consideration should be given to heavy metal toxicity testing, which can be associated with muscle/joint pains.

G) Home Life - Does the patient have a congenial or disharmonious home environment? The best of care may be of limited benefit if the patient does not have a pleasent environment in which to live.

H) Pure Water - Is there an adequate amount of pure water (distilled is preferred) taken?

I) Activity- Gentle activities such as swimming are to be encouraged. In the early stages of care, rigorous physical exercise is contraindicated.

J) Food and Inhalant Allergies - Has the patient been properly tested for food allergies (the patient should be allergy tested for both IgE and IgG4 mediated allergic reactions. Skin patch testing, and cytotoxic testing are not reliable methods of measuring allergic responses.) Even the American Arthritis Foundation now acknowledges food allergies as a contributing source of rheumatic disease in many patients.[7] Inhalant allergies may also exacerbate symptoms.

K) Family history - Are there other family members with R.D? While an individual may be genetically prone to R.D., that does not

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Who Would Have Believed It?

by Perry A. Chapdelaine, Sr.

If I had the pleasure of shaking your hand, would you believe that you just shook the hand of a man who touched the hand of a man who watched Lincoln pass by in a horse and carriage, while holding his mother's hand?

Could you believe that my beloved grandfather Perry was one of the original sod-house settlers of North Dakota, and was given a land grant signed by Teddy Roosevelt? (I have the grant to prove it.)

Who would believe that back in the late seventies and early eighties I suffered from "galloping" rheumatoid arthritis, a disease so painful and so depressing that I literally didn't want to live?

Perry Chapdelaine, Sr.
Executive Director of
The Arthritis Trust

Having faced death full on several times in my life, and also having faced crippling, painful rheumatoid arthritis, I came to a universal truth -- we are not so fearful of dying, as we are of living without compassion, hope, or being free of pain. I fully understand those who believe in euthanasia, although that doesn't necessarily make me their champion.

Who would have believed back then, in the seventies and early eighties, that, contrary to all the advice and wisdom of some of the very best doctors, that I could or would get well?

Somewhere in the Bible is a metaphor very real to me now, that it is easier for a camel to pass through the eye of a needle than it is for a rich man to pass through the gates of heaven. I've noted many a rich man who can afford the most up-to-date prestigious rheumatologist, who nonetheless cannot get well. This is also true for heart problems, cancer, diabetes and so on.

Yet -- here I am -- well now for quite a number of years, even though I was once financially impoverished, sick, and prepared to face my final end.

Who could believe this?

Who could believe that a little ol' country doctor, Jack M. Blount, Jr., M.D., not only found a way to get himself well, but also me, along with about 16,000 other rheumatoid arthritics? Or that the sequence of events leading to these wonderful, unlikely cures were brought about by the curiosity of one California doctor, Robert Bingham, M.D., who learned the method from a world-renown nerve specialist, Roger Wyburn-Mason, M.D., Ph.D. of England, and who brought the wonderful news to America, where Dr. Blount learned of it?

Who could believe that, while all the world's leading physicians were propagating their "truth", that rheumatoid diseases were incurable, Roger Wyburn-Mason, now ostracised for his outrageous teachings, was quietly going about the business of telling folks -- from Australia, to England, Japan to the U.S. -- how to achieve wellness from this affliction? Or that there were folks all over the world who were now free of this hateful disease?

For that matter, who could believe that each of these doctors in the chain of wellness would be sufficiently open-minded so as to try something new, different, and unusual?

But back to me!

Who could believe that, once begun, I'd stay free of this horrible infliction for 17 years?

Or who could believe that at age 72 I'd be jumping out of an airplane just because I'd always wanted to? -- and besides, one of my board members, Nancy Huggins, asked me to go. Who'd believe that I, the old-man wouldn't get hurt while she, years younger, would hurt her knee.

Or that, at the age of 73 I'd weekly still be dancing jitterbug (East and West coast swing) and country and western dance?

Who could believe that the good Lord would use me to bring a powerful message of hope and wellness to hundreds of thousands of arthritics by means of mailings to millions throughout the United States -- and now Canada?

Finally -- and most astounding of all -- who would believe that during the age of my second childhood, I'd fall in love, and marry a beautiful young lady who says that she loves me completely, wrinkles and all?

Certainly I, who have lived through these many quarter-of-a-centuries, find it very difficult to believe any of these tall tales!

So, how can I expect you to believe such yarns?

Well, whether these stories are true or not, I've a date in the Philippine islands to marry on August 20, 1998, a most beautiful and lovely and intelligent young lady. By the time you read this, it should be done.

Wish us long life and happiness -- please!

Supplement to ***The Art of Getting Well***

Cartilage Replacement: The Polymer Age

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Creeking, Painful Joints

We estimate that perhaps as many as 56,000,000 Americans need cartilage replacement, usually from some form of active arthritis such as Osteoarthritis or Rheumatoid Disease, including Rheumatoid Arthritis.

Although nutritional factors can be a dominating causative source, there are all too many reports of the ineffectiveness of chondroitin sulfate and glucosamine sulfate, with or without special herbs and essential fatty acids, to believe that these ingredients alone are the final answer.

Don't take the above statement wrong. We were the first in the nation to report on the importance of glucosamine sulfate and chondroitins through one of our medical seminars via Luke Bucci, Ph.D., and his research. (See our *Prevention and Treatment of Osteoarthritis*). The many letters we've received describing the ineffectiveness of these two ingredients, despite public relations hoopla, has led to formulation of this general answer, when asked: "We believe that glucosamine sulfate and chondroitin sulfate are excellent nutritional supplements in most cases, and will actually improve some arthritic conditions, particularly if these are the only nutrients lacking."

In most of us though, no matter the cause(s), cartilage simply disappears little by little until joints creek, and deathly pains spring alive from their creeking.

So, what can be done when cartilage is gone?

Normal Solution to Lessened or Absent Cartilage

Alternative Medical Methods

Bone that rubs on bone without cartilage to cushion their actions creates a clicking or grating sound, and often inflammation at the joint.

F. Batmangheildj, M.D. maintains that it is the lack of sufficient water intake (plus appropriate salt intake) that causes the cushioning effect of cartilage to be reduced, thus leading to joint problems. (See our *Prevent Arthritis and Cure Back Pain* By F. Batmanghelidj, M.D.© ; also his *How to Deal With Back Pain & Rheumatoid Joint Pains* and *Your Bodies Many Cries for Water*.)

Morton Walker, D.P.M. and William J. Faber, D.O. maintain that it is often lax or torn ligaments and tendons that create unstable joints, thus leading to a wearing away of cartilage. The body's attempt to compensate for this instability also may lead to calcium spurs that cause additional joint immobility, and pain. (See Walker's and Faber's *Pain, Pain Go Away* and Faber's and John Parks Trowbridge's, M.D. *Do What You Want to Do*.)

Traditional Medical Methods

Before a joint becomes totally unusable, traditional medical advice recommends an "unloader" brace. This is often a hi-tech-age combination of titanium and space-age carbon straps shaped into an exo-skeleton around the unstable joint. The idea is to take the load off of the joint, and transfer weight to the exo-skeleton around the joint.

Many people are helped by this expensive device ($1100 or more), but many also find it more of a psychological boost than of immediate joint benefit, as it was with me.

When the joint becomes unusable, due to pain and inability to function, traditional orthopedic advice is to have a joint replacement. A costly, rather serious operation is performed which cuts into the joint bone, and either splices onto the bone, or replaces the socket entirely, with metal and/or plastic replacements. This

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is deficient, the consequence is one of infection, chronic inflammation and eventually tissue damage and disease.

PLANT STEROLS/STEROLINS: WHAT ARE THEY AND HOW DO THEY MODULATE THE IMMUNE RESPONSE?

Plant sterols and sterolins are amongst the many phytochemicals (biologically active molecules isolated from plants) which have, in recent years, stimulated research into the healing and protective effects of plants. Both sterols and sterolins were identified and chemically elucidated as early as 1922. They are plant "fats" present in every single plant (fruits and vegetables) and although chemically very similar to the animal fat, cholesterol, they are totally different in biological functions. In the natural state, they are bound to the fibers of the plant and for this reason, they are difficult to desorb from the fibers during the normal transit of digested food through our gut, especially in the case of older people whose digestion is less effective than that of a younger person's. Seeds are the richest source of the sterols and sterolins and yet, the refining processes applied in the food industry render the staple foods useless because they remove the sterols and sterolins to make the product more appealing to the eye (for instance, in order to prevent the precipitation of the fats in so-called cold pressed oils, the oil is heated and refined to remove the sterols/sterolins).

Also of importance is the fact that our modern diet is low in fresh plant materials (vegetables and fruits) because we have recourse to the fast food outlets or we are generally carnivorous and do not consume sufficient fruits and vegetables.

Sterols and sterolins have been shown to modulate the functions of the T cells both *in vitro* and *in vivo* by enhancing their cellular division and their secretion of these important regulatory soluble factors called lymphokines (IL2 and γ-IFN). It is important to note that only the function of the so-called T_{H1}cells seem to be enhanced leaving the activity of the T_{H2} helper cells unaffected. This is crucial because it is these specific lymphokines which are responsible for controlling the activity of the B cells. Both IL2 and IFN-γ are able to switch off the release of the lymphokines which help the B cells to make antibodies,

Now in the case of rheumatoid arthritis, it is thought that the over-activity of the B cells is directly involved in the release of antibodies which attach themselves to the synovial tissue and the destruction thereof. Also, the antibodies form complexes with other antibodies and precipitate within a joint: this is thought to initiate the entire process of inflammation.

Furthermore, it has been shown that the secretion of inflammatory cytokines released by macrophages is very effectively inhibited by the sterols/sterolins.

We have shown that the synthesis and release of both IL6 and TNF-α (both factors are referred to as pro-inflammatory factors because they initiate and maintain inflammation) are switched off when macrophages are cultured in the presence of a mixture of sterols/sterolins. This work confirms earlier observations made by using an animal model (rats) in which an inflammatory state was induced in the paws of the animals using artificial agents. However, the pre-treatment of the animals with sterols/sterolins resulted in the absence of such inflammation.

The above therefore indicates to us that the plant fats are capable of carrying out a natural anti-inflammatory activity at sites where the chronic inflammation is present. This they do by switching off the very factors which initiate the process.

EVIDENCE FOR THE INVOLVEMENT OF THE IMMUNE RESPONSE AND ITS MEDIATORS IN THE DISEASE PROCESS OF RHEUMATOID ARTHRITIS:

Synovium from a patient afflicted with RA contains the cellular infiltrate made up of T cells, macrophages and B cells. At sites of active tissue destruction, it has been shown that there are very high levels of the cytokines directly involved in the inflammatory process (eg. IL6, TNF-α and IL-1) and this destruction can be prevented by specific inhibitors or molecules which counteract the activity of these factors. Furthermore, it has also been shown that damage can be induced in normal healthy cartilage by adding the fluid from a rheumatoid arthritis patient's synovium to the healthy cartilage.

More recently, it has been shown that when one looks into the types of T cells infiltrating the synovium, such cells are pre-dominantly of the T_{H2} type rather than of the T_{H1} type. To recall, the T_{H2} helper cells secrete the growth factors which help the B cells to change into antibody factories and to make more of these proteins. Hence, it stands to reason that the T_{H2} cytokines are directly involved in the destruction of the synovium by the antibodies which we often refer to as the rheumatoid factors (RF's). These RF's form the complexes with other antibodies and often precipitate at the site and thus initiate the recruitment of the inflammatory cells. These complexes (also called immune complexes) can be demonstrated in the synovium fluid and even the serum of patients.

When one recalls the modulatory activity of the sterols/steroIins, it is not surprising that these plant fats are beneficial in the control of this chronic disease. Indeed, we have been able to show that the sterols/sterolins enhance preferentially the activity of T_{H1} cells and also inhibit the synthesis and release of the other factors which induce inflammation. We are therefore able to control the disease by preventing the damage caused by the inflammation but more importantly, we are able to reverse the immune abnormality at the site of disease.

The major differences between the use of conventional medicines and the sterols/sterolins in the control of rheumatoid arthritis is that conventional drugs are mainly aimed at inhibiting the entire immune response and the inflammatory process, hence the use of anti-inflammatory compounds and immunosuppressives (cortisone, etc). Needless to say, such treatments are not without side effects and dangers because of their non-specificity and we all know that chronic use of immunosuppressives eventually leaves the individual totally open to opportunistic infections (or even common infections) because the immune system is kept suppressed to protect the body from the onslaught by the immune response. More seriously, it should also be remembered that such immune suppressed patients are more prone to the development of more life threatening tumors and carcinomas.

The sterols/sterolins are entirely different in their function in that they are targeted at the abnormality and they correct these immune dysfunctions. Many factors can lead to the malfunction of the immune response, especially that represented by the regulatory T_{H1} CD4 cells. These may include infection by specific pathogens which target these specific cells (for example the HIV) but other factors such as chronic stress (physical as well as psychological) and bad nutrition can ultimately lead to the same end result. It therefore stands to reason that many chronic diseases are totally preventable by ensuring the intake of the essential micro-nutrients, sterols and sterolins. They are also anti-inflammatory in activity in that they are able to switch off the factors which maintain the inflammatory process.

The major advantage of the use of sterols/sterolins in the management of rheumatoid arthritis is that the plant fats are natural, non-toxic and without side effects (no general immune suppression). This revolution

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doom them to the condition for life.

Spinal Care:

Spinal adjusting of the R.D. patient by a qualified Chiropractor or Osteopath is of benefit to many patients with the following considerations in mind;

1) The R.D. patient should be treated gently. Gross manipulation is generally contraindicated.

2) The R.D. patient frequently suffers from impaired digestion with resultant mineral imbalances causing spasm and tautness. The R.D. patient is unlikely to receive full benefit from spinal adjustments until mineral imbalances are corrected and biochemical balance improved. To accomplish this, it is vital to improve digestion. Simple steps e.g. careful chewing, eating, smaller portions, avoiding allergic foods, relaxing prior to eating, etc., are all helpful. A nutritional/ digestive workup is essential. I have focused on this area in my practice for many years with extremely gratifying patient results, both with my own patients and with patients referred to me by Doctors of Chiropractic and Medical Physicians.

3) Preparation of the R.D. patient prior to the adjustment makes the patient more comfortable and allows the adjustment a greater likelihood of holding. Some suggested measures:

a)The application, of heat and or gentle massage prior to the adjustment to relax the musculature.

b) A post adjustment period of rest on the adjusting bench.

Electric modalities e.g. ultrasound and electrical muscle stimulation have not proven of value in helping patients with rheumatic diseases.

The Doctors Attitude

Most R.D. patients have been through the mill. The unrelenting pain can cause depression and anger.

It has been suggested that the R.D. patients "mental attitude" is responsible for their illness. While this may play a role in some cases, it is more likely that the depression, anger, etc. *results* from their unrelenting pain.

I was diagnosed with R.D. in 1976 (in the form of ankylosing spondylitis, mixed arthritis or psoriatic arthritis, depending on the physician I saw at the time). I know the toll this takes on one emotionally. A body with unrelenting pain leads to depression not easily escaped from. Patients may put on a brave face, but the emotional/physical burden is tremendous. R.D. patients need warm, sympathetic, understanding. The doctor who spends little time per patient visit is best advised to refer to another doctor with good skills who can give the R.D. patient adequate time to deal with emotional and physical aspects.*The R.D. patient often needs to share their concerns with a fellow human being who also happens to be the doctor.*

Psycho-social Factors

Psychosomatic studies of R.A. have had periods of popularity. Researchers in this area have concentrated their efforts on whatever theory was in vogue. Meyerowitz notes that to ascribe the disease. to psychological factors alone is a narrow perspective that "oversimplifies issues". He proposes a better approach is to . . . examine the possible role of psychological variables in the etiology [cause] and course of rheumatoid arthritis in the context of all the available information from the molecular to the sociological-epidemiological level."[8]

At question is not whether psycho-social factors cause R.D., but to what extent they contribute in relationship to genetic, biochemical, structural, environmental, and other influences.

Recovering From Rheumatic Diseases

In the twenty plus years I have worked with rheumatic disease patients (myself included), many have returned to good health. I do not share the pessimism widespread among patients and doctors. Among Doctors of Chiropractic I frequently hear statements such as, "of course there is no cure for arthritis, but Chiropractic can help make the patient more comfortable". Some Chiropractors I have met tell me that I could not have had ankylosing spondylitis or psoriatic arthritis because if I had, "I would now be permanently crippled". Much of the Chiropractic Profession along with the Medical Profession seems to believe that recovery from R.D.s is not possible. The reader should be assured that while no two cases are identical, many persons *have recovered from R.D.s of* many varieties, if the proper steps are taken and the patient is willing to make the, necessary efforts. Medical practitioners are particularly pessimistic. Remarks are heard such as: "You've rheumatic arthritis and there is no cure, but remember that aspirin will kill the pain and we also have methotrexate, phyenylbutazone and many other drugs to suppress the immune system . . . also cortisone and prednisone, but you will have to learn to live with it and accept the fact that it will get worse with time. . . . Patients become conditioned to believe that there is nothing but drugs to mask the symptoms while their joints are destroyed progressively by their immune system.

This kind of thinking is tragic for a number of reasons:

1) It leads one to believe that all arthritic/rheumatic conditions have the same cause(s) which is not true.

2) It leads to a sense of defeatism by both patient and doctor, one which experience with numerous patients tells me is unwarranted.

3) It leads the patient and doctor into hoping that a single cause and therefore cure will be found for all cases of arthritis, rather than encouraging careful investigation of each patient's case followed by hard work to evolve the patient back into a state of health and comfort. It can be done!!

We evolve into states of poor health, and we can evolve out of them, if *we have a clear understanding of causes and make the right corrective efforts!*

CASE STUDIES

These cases exemplify patients with rheumatic diseases in my practice.

CASE NUMBER ONE:

Summary: A thirty three year old female presented with complaints of fatigue, joint pain and swelling, generalized stiffness, and fatigue. She had been under Chiropractic Care for three years and had consulted her M.D. who gave her anti-inflammatory drugs. She discontinued the drugs after they gave her nausea. She was very anxious over her deteriorating condition.

A detailed case history and physical examination was performed, including a review of her previous care. Physical examination revealed general muscle guarding and joint stiffness/pain/sweliing in multiple areas including the knees, ankles, wrists, and low back. The family history was non-significant. The following laboratory studies were obtained:

Standard Lab Work: SMA (blood chemistry) CBC, Rheumatoid Disease Panel (including R.A. factor and Sed. Rate).

Metabolic/Nutritional Laboratory Studies: computerization of diet, mineral analysis, intestinal permeability study, allergy profile (IgE and IgG4).

The patients blood chemistry and CBC were within normal limits. The sedimentation rate was over 60 (under 20 is normal for a female). The diet was heavy in refined carbohydrates. The mineral profile revealed numerous mineral imbalances including elevated aluminum. The patient showed no immediate (IgE) type allergies, but had delayed (IGg4) type allergies to wheat, corn, milk, and beef. The patients intestinal permeability was elevated.

The patient was put on a detoxification program followed by a rotation diet with elimination of allergens. Refined carbohydrates were eliminated. Protocols were taken to help the intestine become less permeable. Counseling was given regarding pertinent hygienic factors.

Outcome: The first two weeks of the program were difficult and the patient experienced an exacerbation of symptoms. During the third week she felt improvement with less joint pain and improved vitality.

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Arthritis/Rheumatism: The Forgotten Patients

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By the fourth week all joint swelling, redness and stiffness were gone and the patient boasted of being able to take long walks symptom free with her husband. Repeating the sedimentation rate revealed it to be in the normal range (having dropped from sixty to twelve). A follow up on the patients intestinal permeability showed it within normal limits.

Follow Up: Two years later the patient continues to be healthy and symptom free as long as she continues to watch her diet, obtain adequate rest and sleep, and observe other important hygienic factors. She leads an active life and has since had a healthy baby.

Discussion: The patients dietary intake was nutrient poor, and contained foods that stimulated her immune system. The intestinal tract failed to obtain nutrients for repair and therefore had altered permeability allowing an increased antigenic load to the immune system. With rest of the G.I.tract, followed by elimination of allergens and providing correct nutrients, the antigenic load decreased, G.I. competency returned, and the inflammation dissipated.

CASE NUMBER TWO:

Summary: A twenty seven year old male presented with severe psoriatic arthritis with profuse scaling of the skin over more than eighty percent of the body including the face, along with severe joint pains in multiple areas (SI joints, knees, elbows, fingers and toes.) Radiographic studies revealed spondylosis of the cervical spine with arthritic changes. There was moderate joint destruction of the toes. The cervical spine had multiple areas of misalignment which reoccurred despite Chiropractic Care. The patient was depressed having consulted both Medical and Chiropractic Doctors for the past three years without success. He had been on a variety of anti-inflammatory drugs which had resulted in gastrointestinal distress.

The patient had a sedimentation rate in excess of 110, multiple food allergies of the lGg4 (delayed) variety, and increased intestinal permeability. The patient was put on a detoxification program to rest and desensitize the G.1 tract. He obtained both fresh air and natural sunlight daily. Following the detoxification program the patient was put on a individualized dietary program.

Outcome: Within three weeks the joint pains (present for over two years) disappeared, except for some minimal residual in the cervical spine. The psoriatic lesions reduced by over 40% by the end of the fourth week with the remainder being far less intense. The sedimentation rate dropped to 25.

Follow Up: At the end of the fifth week the patient returned home with an individualized diet to help correct the intestinal permeability, and avoidance of allergens He was instructed to continue his Chiropractic Care and to follow a set of hygienic instructions.

Discussion: Dermatological problems frequently have their origins in the gastrointestinal tract. A simultaneous occurrence of both skin and musculoskeletal manifestations of G.I. malfunctioning is common. Imbalance of the G.I. tract caused by poor diet, allergen exposure, emotional stress, etc., can lead to both musculoskeletal and dermatological symptomotology. By correction of the G.I. origins, both the musculoskeletal (arthritic/rheumatic) and dermatological complaints can frequently be corrected simultaneously.

CASE NUMBER THREE:

Summary: A forty year old female presented with complaints of ulcerative colitis over an eighteen year period accompanied by severe arthritic complaints in the hands, elbows, shoulders and knees over the past six months. Previous care had included eighteen years under a gastroenterologist resulting in the removal of fifty percent of the colon, and seeing a rheumatologist who had put her on steroidal compounds. The patient had also received care from a Doctor of Chiropractic for the past two years for low back pain. The patient complained of chronic fatigue, ongoing diarrhea with bloody stool, depression, and a desire not to have to take more drugs or have surgery.

The patient was examined and tested for gut permeability, mineral imbalances, and for food allergies. Intestinal permeability was elevated. Mineral balance showed a pattern suggestive of general depletion and malabsorption. Food allergy testing, including both IgE and IgG4 revealed allergies mostly of the IgG4 variety, of foods included in the patients diet such as egg, wheat products and dairy, *the very foods reccomended to her by her gastroenterologist and medical dietitian to "sooth the* colon". The patient had multiple vertebral misalignments of the lumbar spine which her Chiropractor adjusted but could not get to hold.

The patient was put on a hypoallergenic liquid diet for a period of ten days followed by a diet of cooked fresh vegetable foods and moderate amounts of proteins excluding all positive allergens. The patient continued to receive chiropractic care and was instructed by our office on hygienic measures to take e.g. additional rest and sleep, fresh air, emotional poise, etc. On the patients own volition she began to reduce the amounts of corticosteroid compounds that had been prescribed to her for the colitis and arthritis.

Outcome: During the first two weeks the patient went through a stormy period of discomfort with increased joint/muscle pains. By the eighth day the bowels began to quiet and the patient's chiropractor reported that she was holding her adjustments much better. Joint and muscle pain subsided by the fourth week accompanied by an increase in the patients energy level. In three months the patient reported that her stools were now semi-formed with no more blood and that her joint and muscle pains had reduced by over 80%. During her third month of care she went off her dietary plan and ate a variety of foods she had been warned to avoid, since she was "feeling so well". Within ten days she was again passing bloody stools and experiencing severe joint and muscle pains. Returning to our office, we gave her a program for resting her G.I. tract and urged her to follow her entire health building program carefully. In ten days she was again feeling well and reported that she had "learned her lesson."

Follow up: The patient has continued well for the past three years without joint pains or colitis, although she still has some looseness of stool (no blood or mucus) due to having had 50% of her colon removed prior to coming to our office.

Discussion: It is common to see patients with a medical diagnoses of inflammatory bowel syndromes -- i.e. Crohns disease and ulcerative colitis -- report that they also experience joint/muscle pains medically diagnosed as rheumatoid arthritis, fibromyositis, mixed inflammatory arthritis, etc. These patients frequently have poor digestion and dietary habits, and allergic problems. Standard allopathic care including corticosteroids, N.S.A.I.D.S. and surgery serves to aggravate and complicate the clinical picture. Resolution of the patient's digestive dysfunctioning frequently results in ending the bowel problems and rheumatic complaints simultaneously.

Patients must be cautioned that a return to former destructive behaviors that created the R.D. (dietary indiscretions, emotional stress, lack of sleep, etc.) will also return the symptoms.

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Sterols/Sterolins

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ary approach to the treatment of autoimmune diseases will certainly be the approach of the future.

Note: According to Dr. Bouic, "The company that has sponsored the above reported research has encapsulated these molecules and the recommended dosage is 1 capsule 3 times per day on an empty stomach. There is no drug-induced adverse effects based on the usage of the capsules by over 25,000 clinical trial volunteers. The company is currently marketing the capsules in South Africa under the tradename of ModuCare™ and hopefully this will shortly be available in North America. The formulation is patented internationally including the United States and should any requests for the product arise as a result of this article, these should be directed to the sponsoring company at South Africa telephone number 27-11-3151430 or Fax 27-11-3151462.

Dr. Bouic is currently finalizing the protocol for a placebo-controlled double blind trial in rheumatoid arthritis patients using the ModuCare and as soon as the results of this trial are available, they will be forwarded to The Arthritis Trust of America, 7111 Sweetgum Drive, S.W., Suite A, Fairview, TN 37062-9384. "Most of the data to date has been based on individual cases."

Arthritis/Rheumatism

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tion.

8) Meyerowitz, S.W. "The Continuing Investigation of Psychosocial Variables in Rheumatoid Arthritis" *Modern Trends In Rheumatology II*, Chapter VII (1971). P.92

In Part III Dr. Goldberg advises the patient with Rheumatic Disease on steps back to improved health.

About the Author:

Dr. Paul A. Goldberg is a graduate of Bowling Green State University (B.A.), The University of Texas Medical Center Graduate School of Public Health (M.P.H.), Life College (B.S.) and Life Chiropractic College (D.C.). For the past eighteen years he has been on the full time faculty of Life University where he is a Professor of Nutrition and Gastroenterology.

Dr. Goldberg maintains a private practice at 2480 Windy Hill Road Suite 203 Marietta, Georgia 30152, where he combines the practice of Clinical Nutrition, Natural Hygiene, and Chiropractic. His primary clinical interests, which he addresses via a Hygienic/Biochemical/NutritionaI perspective, are disorders of the gastrointestinal tract, arthritic/rheumatic disorders, and chronic fatigue syndromes.

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Letters To Your Editor

You told me I could get your articles free if I had access to the Internet. It occurred to me that I had read that our library offers that service. . . .

I thought I'd write and send this information. I'm so appreciative of the service you provide!

H.G.: Paducah, KY 42002

Dear H.G.: We're more than happy to help where we can -- and yes, we've confirmed that many libraries do offer this service without charge. Thanks for bringing this to our attention.

It's unfortunate that you live in a state where alternative/complementary/holistic physicians have been prosecuted by a 19th Century-thinking medical board, and that for many of the good, workable techniques for achieving wellness require you to leave your state.

A number of doctors on your list have marked that they will do your recommended anti-microorganism treatment for rheumatoid arthritis. When I called them, they said they were no longer doing this treatment, but used another, and they would not provide my doctor with the treatment protocol.

My doctor is still willing to use the treatment on me, but I need the protocol. Can you send it to us?

L.S.: Phoenix, AZ

Dear L.S.: Unfortunately, we have no training program for doctors to use and understand our recommended treatment protocols, and so some doctors, who study the treatment briefly, are not really qualified to use them, and they give up easily, going on to try other things. At least they're open-minded enough to try to get their patients well. Also, remember, there's not just one cause for Rheumatoid Arthritis, and there are many treatments that can be effective. The only interest we have is that the patient achieve wellness, and therefore we're not overly protective of any particular treatment, although we do have broad recommendations.

Gus J. Prosch, Jr., M.D. of Birmingham, AL claims a 75-80% cure rate with rheumatoid arthritis, using Roger Wyburn-Mason's treatment, along with nutritional guidance and other programs.

Joseph M. Mercola, M.D. of Schaumburg, IL claims a 75-80% cure rate with rheumatoid arthritis, using Thomas McPherson Brown's treatment, along with nutritional guidance and other programs.

I'm enclosing a book for your doctor to read entitled Arthritis, *by di Fabio and Prosch, which will give you our recommended protocols.*

Meanwhile, please be advised that you can get all of our articles, including treatment protocols, on our homepage at http://www.arthritistrust.org *without cost. And in that homepage, you can link into other successful programs.*

Hi! Yesterday I received your letter, together with the book *Arthritis*. I already started browsing it and could not get my eyes off, especially the case histories part. I couldn't believe that even old and worst cases of arthritis got healed. Congratulatons for a wonderful and noble work you have done. Keep up the good work!

Briefly I showed it to my co-worker and right away she wanted to check from a local bookstore if they had it for immediate reading.

From your lists of physicians, there are three in this area, but without insurance, I could not handle the expense of the tests they require. I'm thinking of jotting down some of the medications, and seeing if my outpatient clinic doctor will prescribe them for me.

Treatment for me could be a long overhaul because I have a very bad spine, hips, shoulders, and neck, probably resulting from a stair fall 3 years ago. I have been praying for a miracle -- a healing which does not entail a lot of money. Enclosed is $10 donation for your book.

F: California.

As we've explained many times, there are multiple causes for various kinds of arthritis, and even multiple causes for one kind, Rheumatoid Arthritis. There is also a further difficulty in finding proper treatments, and that is that even if you could afford tests required by certain doctors, you may need to find a number of different health practitioners to solve all of the possible causes. For example, you may need a biological dentist, and they're few and far between, although Price-Pottenger Nutrition Foundation (P.O. Box 2614, La Mesa, CA 91943-2614; (619) 574-7763) will have a good listing of them.

The good news is that many of the treatments are self-administered: proper and adequate nutrition, candidiasis diet, food allergy assessment, and so on. It's just a matter of learning and applying what your ancient ancestors knew!

As to our books: without a lot of financial clout, and especially a great deal of money invested in advertising, book distribution throughout the nation's bookstores is unlikely. However, you can order our books as a premium through us with a tax-exempt donation or you can order through any bookstore in the nation, and also through the internet, by amazon.com and barnesand noble.com, two large book suppliers that have permitted us to associate with them. If you order through the internet, you'll be amazed at how fast is their delivery system!

Cartilage Replacement: The Polymer Age

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frightening procedure has been performed by the hundreds of thousands, and has also been a boon to hundreds of thousands, with some notable failures. It is also a boon financially to those who specialize in this operation.

One failure I have in mind is the hip replacement made on one of our founders, Jack M. Blount, M.D., who is also one of the two people whose name graces our legal company name.

Dr. Blount was bedridden from Rheumatoid Arthritis as his hip had deteriorated to the point where he could no longer walk. He decided to have a hip replacement which involved a ball and socket arrangment that was embedded in the remainder of his large leg bone and his hip.

His first operation was a great success, but he limped terribly, because the doctor had not measured distances correctly, and one leg was now shorter than the other, requiring built up shoes and uneven trouser legs.

After a second operation,this flaw was fixed to some extent, but the most that could be said about its success is that Dr. Blount is not bedridden.

Others, of course, have great success with replacing finger joints, and other joints of the body.

The major problem with these joint replacements, aside from the trauma, lengthy recovery, pain and cost, is that they never function as well as the original joint, and also, according to materials used in forming the artificial joint and the amount of use made of the joint, may also need replacement periodically -- more money, trauma, lengthy recovery, pain and cost!

Needless to say, joint replacement is a medical procedure not to be taken lightly!

Better Things for Better Living Through Chemistry

E.I. du Pont de Nemours chemical company (and munitions manufacturer stemming from our revolutionary days) may have been the first to coin the phrase of "Better Things for Better Living Through Chemistry." They, after all, helped the ladies get rid of stocking seams and sagging silk, introducing the age of stretchable Nylon, cellophane wrappings for our foods, and many other plastics.

Since those early 1940s development and production of plastics has become a fantastic engineering process, wherein it has been said by some in the business that "any and all parts of a gigantic building can now be made of plastics were one willing to pay the price, such is the knowledge we now have of formulating the desired material characteristics on demand."

Polymerized Cartilage Replacement

Let's say that you're in your sixties or seventies, and you have lost your cartilage in the knee, and you want it replaced like new. What can you do?

Well, one solution is to take some cells from those tissues that form cartilage, and clone them in the laboratory, and then add these clones to those in the knee, allowing time for regrowth.

Good idea, right?

Wrong! Unfortunately this has worked to date only for those who were clever enough to have had cells removed about fifty or sixty years ago, and kept sterile and alive in a laboratory all through the years of our mis-adventures.

There is -- perhaps -- an adequate substitute, however.

Advanced Bio-Surfaces, Inc. of Minnetonka, MN has requested permission from the FDA for a series of clinical trials to replace cartilage in joints by use of a polyurethane material that can be introduced into the joint with minimally invasive arthroscope, a device that sort of "peaks" into the joint through a small slit made in the skin and muscle at the joint.

The polyurethane is then flowed into two anchor points made at opposite sides of the joint (two different bones) in the form of cones.

The polymer polymerizes (gets hardened) producing a mechanical lock in the joint in 3-5 minutes.

The joint -- such as the leg -- is then extended bringing one part (femoral condyle) in contact with the other part (tibial plateau), according to Dr. Jeffrey C. Felt, Chairman and Chief Technical Officer of Advanced Bio-Surfaces, Inc. "This shapes the polymer and gives us a congruent surface with the femoral condyle so that we have, in a sense, a custom-formed polymer implant."

"The patented procedure forms a custom fit, biocompatible joint surface intended to simulate certain characteristics of human cartilage, corrects angular deformity, and thereby gives pain relief."

Research conducted on 70 sheep have so far demonstrated that the polymer is biocompatible, and the tissue and bone adjacent to the polymer has responded very well, showing no signs of inflammation, Dr. Felt reported. Neither was synovitis (inflammation of the membrane surrounding the joint) observed, nor any abnormalities in routine chemistries or tissue specimens taken from multiple organs and lymph nodes.

After 12 months follow-up, the polymer seems to be holding up very well in sheep. Bench testing (in the laboratory) has shown that the material should be able to withstand at least 10 years of activity in a 50-year-old person, which, to say the least, is a remarkable period for such a slight operation.

Past and Coming Trials

In addition to sheep, and human cadavers, in 1997 six Norwegien patients volunteered for this process. European trials will be expanded to perform more knee joint restorations in several European countries, and the clinical data obtained will be used to support commercial marketing in Europe. This new data will be used to support pre-market approval submissions to the FDA, after which commercial marketing can begin in the United States.

At this writing Advanced Bio-Surfaces, Inc. is planning to set up 15-20 sites in the United States for clinical trials under review by the FDA.

Joints to be Replaced in the Future

Advanced Bio-Surfaces, Inc. Joint Restoration system intends to pursue other "on site" (in-the-joint) cured polymer systems, such as the spine, hip, shoulder, great toe, the small joints of the hand and the temporal mandibular joint (TMJ).

Our Recommendations

Literature and books referenced in our publication listing adquately cover many of the factors that lead to joint erosion: nutritional defects, candidiasis, food allergies, foci of infection, pollution, mercury poisoning, pesticide and herbicide accumulations, lack of water (and salt), stretched or torn tendons and ligaments, thyroid inadequacies, and so on.

After all the treatments based on these various factors have been pursued, and the joint has eroded to a point of mal-function and pain, Advanced Bio-Surfaces, Inc. may have very well developed a brilliant, effective strategy for solving a problem that is frustrating an increasing number of millions of humans.

Keep your eye on this procedure. It looks as though it is a sure winner after all else has failed!

Advanced Bio-Surfaces, Inc., 5909 Baker Road, Suite 550, Minnetonka, MN 55345; Phone (612) 912-5400; Fax (612) 912-5410; For doctors: Attn: Jeffrey C. Felt, M.D., Chairman and Chief Technical Officer or William J. Arnold, M.D., Executive Vice President and Medical Director.