

Refractory Idiopathic Thrombocytopenic Purpura: An Integrated Approach to Treatment

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Introduction

Idiopathic thrombocytopenia purpura (ITP) is a diagnosis of exclusion, which requires the absence of other abnormalities. Patients are in their “normal” or usual state of health with the exception of the bleeding, and the physical examination should only reveal petechiae, ecchymoses or nose bleeding. Bone marrow analysis should have entirely normal findings or show an increased number of megakaryocytes.

Bleeding usually begins in the skin or mucous membranes. Spontaneous bleeding is rare at platelet counts greater than 30,000 per microliter. Risk for bleeding is greater as platelet counts fall below 20,000 per microliter, at which point the patient may begin to bruise easily. At platelet counts less than 5,000 per microliter, persistent gastrointestinal bleeding may occur and there is risk for spontaneous intracranial hemorrhage. There are atypical cases, when a patient can have bleeding symptoms with relatively high platelet counts, and no symptoms with very low platelet counts. Platelets can become the target for attack by immunological factors, auto-antibodies, alloantibodies, or immune complexes. In idiopathic auto-immune thrombocytopenia platelets are sensitized by auto-antibodies directed against glycoprotein complexes, however, the predictive value of these findings is uncertain. ITP occurs more frequently among those patients with systemic lupus erythematosus, primary antiphospholipid syndrome, chronic lymphocytic leukemia, hypogammaglobulinemia and thyroid dysfunction.¹ It is believed that thrombocytopenia develops when there is a diequilibrium between platelet production, distribution and destruction.

In this study, patients that failed to improve using conventional therapies were treated with natural herbs to enhance the health and function of the platelets. This represents an approach opposite to conventional thinking, which aims at suppression of supposed immune destruction of platelets. Conventional therapies include transfusions, ε-aminocaproic acid, which inhibits fibrinolysis, and treatment with glucocorticoids or intravenous immunoglobulins (IVIG), and other immunosuppressive drugs. Despite the success of initial therapy, most adults relapse after the corticosteroids are withdrawn, and often within three or four weeks of IVIG. Often, adults with platelet counts below 40,000 per microliter are candidates for splenectomy. Splenectomy has an initial success rate of 50% to 60%. However, for many patients, the higher platelet counts after splenectomy was not enough to prevent them from having excessive bleeding due to poor platelet quality.²⁻⁵ The treatment for refractory ITP is very complicated and can sometimes bring more risks and harm to the patient than the disease itself.^{6,7}

Treat Target Tissue or Immune System?

The primary author, Dr. Ba, has come to the opinion that the health of the target tissue of this condition, the platelets, may be enhanced as a therapeutic option and has since treated hundreds of patients. Since the origin of idiopathic thrombocytopenia is unknown by definition, this alternative approach to treatment, especially in patients who have failed to respond to conventional treatments, is certainly refreshing. In other medical conditions, Dr. Ba has similarly explored this approach of enhancing the health of the target tissues with great success.

In our work together, we have spent

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much time on the treatment of immune disorders, such as allergies, asthma and so-called auto-immune diseases such as chronic glomerulonephritis, primary biliary cirrhosis, arthritis, and lupus. Our observations and research suggested, surprisingly often, that the fundamental deficiency of these conditions, and of both allergies and asthma, are metabolic imbalance of the cells and tissues involved. The body responds to these deficiencies and protects the tissues by an immunological reaction releasing histamine (allergies), leukotrienes (asthma), and other inflammatory mediators. All of these factors achieve the result, from a cellular sense, of trying to enhance the fluid and nutrition intake into cells and correcting the metabolic imbalances.

Broadly speaking, Western treatment targets the blockage of immunological reactions with antihistamines, corticosteroid, antileukotrienes, and bronchodilators. These treatments rarely result in the reversal of the disease, and often entail significant side effects and increase the chances of making the disease chronic. In the case of ITP, for example, certain powerful immunosuppressive drugs may actually raise platelet counts, however, the underlying imbalance of the body that caused ITP in the first place remains unchanged. People could have relapses, bleeding risk (despite the platelet counts even higher or even in normal range), and most unexpectedly, thrombosis. Our research revealed that ITP could occur in people with platelet functional insufficiency as well as hypoactivity, even though the platelet count is adequate. With our natural therapy, we concentrate on improving the tissue health and promoting normal function of the involved tissues. We have successfully applied this same philosophy of treatment with allergic and autoimmune disease.

There are a multitude of autoimmune diseases characterized by the production of antibodies, or combination of antibodies, and other cellular immune mechanisms

that react with host tissues. For example, the target tissue of systemic lupus erythematosus is DNA in blood cells and many tissues. Other target tissues include joint synovium (rheumatoid arthritis), thyroid (thyroiditis), biliary tract (primary Biliary cirrhosis), pancreatic beta cells (diabetes type I), and acetylcholine receptors (myasthenia gravis).

The common understanding in conventional medicine is that autoimmune diseases represent a dysfunction of the immune system. It is believed that the immune system attacks the target tissue, destroying the target tissue - platelets, in the case of ITP. An alternative view of this disease process would be that there is some quality or functional defect in the target tissue. The human body is designed with a certain intelligence. If there is a qualitative problem with the target tissue, then the immune system responds appropriately by attempting to rid the body of these defective cells or tissues. The ultimate treatment, we often find, is therefore not the destruction of the immune system, but the support and correction of the underlying disorder of the host tissue.

Toxic Tissues

What are some of the factors that contribute to host tissue disorders? Toxins in the tissues are a common cause of autoimmune disease. Toxic tissues or cells are attacked by the immune system in an attempt to rid the body of them. Toxicity can be caused by the build up of any foreign chemical to the body - pharmaceutical agents, pesticides, contaminants, or toxic metals. One of the most common toxic metals to cause autoimmune disease is mercury. This element can become incorporated into the cell membrane, changing its configuration. Thyroiditis, lupus and rheumatoid arthritis commonly have a component of increased mercury levels in the host tissues.⁸⁻¹⁰

Another common cause of autoimmune

disease is infections. Sixty to ninety percent of pediatric ITP cases are caused by viral infections. Various viruses have the potential for causing ITP. Mycoplasma infections are also a contributor to autoimmune disease. These minute bacterial forms can penetrate into many tissues in the body, often incorporating themselves into the cell membranes thereby changing the identity of the cell and attracting immune reactions.

Other Factors in Autoimmune Disease

Autoimmune diseases are often associated with low energy states in the body. Much like what happens to a computer in a power disturbance or 'brown out', the software can become disrupted or dysfunctional. Similarly, with states of reduced energy in tissues, there is a higher potential for the immune system to become dysfunctional. Prolonged stress or depression, insomnia or sleep deficiency are common causes of low energy states. Low cellular energy conditions hamper cell function and detoxifying activity, which can stimulate the immune system to attack the affected tissues or cells. Chinese medicine uses energy exercises (Qi Gong), energizing herbal supplements (ATP precursors), or food products such as Bone jelly and snake meats to successfully treat rheumatism and arthritis.

Any digestive dysfunction can potentially be linked to autoimmune disease. This may be due to nutritional deficiencies. Commonly, autoimmune diseases are caused by introduction of foreign proteins into the GI tract due to inadequate digestion, food allergies, leaky gut syndrome, and decreased hydrochloric acid production in the stomach.

There are many known medications that contribute to autoimmune disease including heparin, quinine, gout medications, hypertensive medications, antibiotics, and anti-inflammatory agents. Hormones can be associated with autoimmune disease¹¹. Estrogen is commonly a factor for ITP and other autoimmune diseases. An-

drogens, or male hormones, decrease the incidence of autoimmune disease. Their effects can be explained by the enhanced cellular energy that androgens produce.^{12,13}

In addition to hormones and medications, vaccines have been implicated in autoimmune disorders¹². Vaccines are a mixed blessing with regards to ITP. Vaccines decrease the incidence of the virus they protect against, yet they themselves have been linked to ITP. The most common vaccine implicated is the MMR vaccine. The incidence of MMR vaccine causing ITP is 1 in 20,000, while the rubella vaccine contributes to ITP in 1 in 3000. Vaccines present several potential problems to patients in that they are inactivated viruses, they introduce a foreign protein into the body, and they depress the immune system for several days. Additionally, until recently, all vaccines had been preserved with a small amount of thiomerasol (mercury).

Treatment Results

The treatment goals of herbal therapy include several components. The primary purpose is to improve tissue quality through improved nutrition and circulation. Detoxification is another very important aim as patients with lower circulation and toxic exposure are susceptible to higher levels of toxin accumulation. "Tissue energy" is a foreign term to most western clinicians. It is known as the "chi energy" in Eastern medicine and represents the vitality of the cells. Without chi energy, cells suffer from the actions of a confused immune system, toxicity, and decreased nutrition. Because of this, the tissues are more liable to develop either autoimmune disease or cancer. Enhancing the vital energy of the cells contributes to clearing toxic buildup and to improving cellular function. Hormone balancing is another goal of therapy, balancing estrogen and androgens in the body. Lastly, our therapy is designed to balance and normalize the immune system.

Let us analyze the individual and

group results of our therapy for ITP. The first patient we treated was a 16-year-old high school student who had a four-year history of ITP. In her family, there was a history of bleeding and nosebleeds. Despite standard treatment by Scripps and Stanford University with high-dose corticosteroids, IVIG, and Imuran, she continued to have symptoms of easy bruiseability, gum bleeding, recurrent infections, and joint pains regardless of her platelet counts. At the onset of herbal therapy, her platelet count was 30,000. She was started on a regimen of herbal teas consisting of the herbs Rehmania Glutinosa, Eliptae Alba, Astragalus and Agrimonia. Although her platelets decreased to 20,000 in the first weeks of treatment, she experienced improvement in her symptoms with less bruising, bleeding, and more energy. She tolerated the herbal teas without any side effects or reactions. After four months, her platelet count increased to 80,000. In eight months, her count was 150,000. At the end of twelve months of monitoring her platelets, her count was 180,000. During treatment, she experienced no further infections, bone pain, fatigue, or bleeding phenomena. She continued the teas for a total of two years, and since that time has remained in remission with no further therapy.

We conducted a larger survey of ITP patients during the period from 1996 to 2001. We treated 20 patients with biopsy-proven primary ITP and followed them for a 12 month period. Their ages ranged from 6 to 76, with duration of disease from 13 months to 12 years. Mean platelet count of these patients was 16,900/mm³. All of these patients had failed to respond to conventional therapy. Three patients had had splenectomies. We divided the therapeutic responses into four categories:

Category 1: Absolute effect was defined as no symptoms and a platelet count greater than 140,000/mm³;

Category 2: Remarkable effect was defined as no symptoms and a platelet count greater than 100,000/ml;

Category 3: Good effect was defined as no

symptoms and a platelet count greater than 50,000/mm³

Category 4: No effect was defined as no improvement in symptoms or platelet count.

These patients were treated with an herbal compound either in tea or tablet form. The tea form is slightly faster acting. The herbal formulas Blood-Well consist of the herbs Rehmania Glutinosa, Eliptae Alba, Astragalus and Agrimonia, and the formula Restore-Immune contains Dioscoura, Ophiopogonis and Bamboo Juice. At three months of herbal therapy, the results were a mean platelet count of 118,500/mm³. The categories of effect were the following:

Absolute Effect	6
Remarkable Effect	8
Good Effect	6
No Effect	0

There were no significant side effects, bleeding problems or hospitalizations during the first four months. At six months, the mean platelet count was 138,000/mm³. Again, there were no side effects, complications, or hospitalizations. The therapeutic responses were the following:

Absolute Effect	9
Remarkable Effect	8
Good Effect	3
No Effect	0

At the twelve-month conclusion of our treatment, the mean platelet count was 143,000/mm³. The response rates were the following:

Absolute Effect	12
Remarkable Effect	5
Good Effect	3
No Effect	0

All of the patients with a platelet count greater than 140,000/ml were able to cease their herbal therapy and remain in remission.

In our treatment of ITP, we have been able to identify various therapeutic catego-

ries of patients. The first category is symptomatic patients with early onset of symptoms without any treatment. Obviously this is the easiest category to treat, as there are no secondary issues of medication toxicity, or infections. These patients typically respond to herbal therapy within two to three months. The second category is symptomatic non-responders to conventional therapy with elevated platelet counts. Despite elevated numbers of platelets, they continue to have bruising and bleeding symptoms. These patients require more treatment time, responding in three to six months. Category three are symptomatic non-responders to conventional therapy with low platelet counts that are candidates for splenectomy. They respond in three to eight months. The last category of therapeutic categories is the most difficult to treat as they are those patients who don't respond to either conventional therapy or herbal therapy. Why is herbal therapy not successful in all cases? The first explanation derives from an Eastern Medicine view that there are actually four types of ITP: Yang deficient; Blood Heat; Yin deficient; and Chi deficient. Our present herbals are designed to treat the two most common types of ITP (blood heat, yin deficient), but must be modified for the other ones. There are several other explanations why our initial therapy may not be effective.

1) Low Platelet Production Due to Suppressed Bone Marrow. For these patients additional liver and kidney tonics must be added to boost the bone marrow production of platelets. Examples of these would be shark liver oil, fish oil, and the herb *morinda citrifolia*;

2) Infections. any occult infection such as gum infections can cause platelet damage. Platelets and RBCs are the transport vehicle for many infective organisms in the blood. The platelets are the most delicate of these conveying blood products and are therefore the first to be destroyed by the immune system. These secondary infections can be treated with a variety of herbal

tonics to enhance the immune system. We also used the Gum-Well topical herbal solution for ITP patients who had severe gingivitis and it helped to raise platelet count remarkably.

3) Circulation Disorders. Any disorder that causes decreased circulation contributes to inhibition of platelet production, perhaps through a negative feedback mechanism from platelet aggregation/thrombus formation/plaque formation. These disorders are often associated with yang deficiency, and respond very well to circulation enhancing herbs.

4) Digestive Problems. Any digestive disorder that inhibits the absorption of vital nutrients to the bone marrow can depress platelet production. Fats are a vital nutrient that improves coagulation and can be suppressed by lack of gall bladder function or lipase production. As previously mentioned, any GI dysfunction such as hypochlorhydria, leaky gut syndrome, and functional GI disturbance can contribute to food allergies and toxic absorption precipitating autoimmune disease.

5) Thyroid Dysfunction. Any thyroid dysfunction can lead to lowered platelet levels. Hyperthyroidism (high thyroid) is toxic to the platelets, whereas hypothyroidism (low thyroid) decreases production and function of platelets.

6) Emotional Factors. No one can deny the emotions associated with such a frightening disorder as ITP. The lack of treatment success, expense and side effects of conventional therapy, and the anxiety of bleeding at any moment can become overwhelming. Excess anxiety, fear, and anger are all stressors that can add to the suppression of platelet production and destruction. Reassurance, understanding, and herbal remedies are ways to allay unnecessary anxiety.

Conclusion

We would like to emphasize that the proper treatment for any chronic degenerative

tive disorder such as ITP should be individualized. The causes of the disease, and the pathogenesis may be very different for each patient. We have to consider all aspects of natural healing including positive and healthy emotions, healthy diet and lifestyle, and avoiding and eliminating toxins. Sometimes it may take years to do this as many toxins accumulate in the fat tissue and bone marrow, which can make them very difficult to remove. The name of the disease is far less important than the body pattern and the environment that caused it. Our practice has indicated that some diseases such as aplastic anemia, chronic glomerulonephritis, lupus, and scleroderma that are considered very difficult to treat by conventional medicine, can be managed very successfully in a relatively short time with proper detoxification and specific nutritional supplements. On the other hand, some ITP cases that are considered less severe a disease can be very difficult to manage if the patient fails to release their emotional negativity, continues to be exposed to environmental toxins and refuses to change their diet and lifestyle. Each individual patient has their own unique treatment to follow to reverse their disease. We believe, as Paracelsus did, that "God (Nature) has not given human-kind any disease without a cure for it."

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