



Allergies and Infections

Conventionally, **allergy** is a primary disease, in which the immune system reacts to foreign substances called antigens. **Infection** is also conceived as a primary process, in which bacteria, yeast (fungus), viruses, parasites, or other critters invade and attack a specific tissue, such as the lungs in pneumonia. In both processes, the **immune system** is the central player. In alternative medicine, both conditions are considered secondary to dysfunction of the immune system and heal by identifying and treating the root-causes.

What Is the Immune System

The immune system (“IMS”) is a highly complex system of cells and related molecules that protects the body. While the target is usually foreign objects, like bacteria, it also detects and destroys defective cells such as cancer (we carry 100 cancer cells at any time as a result of manufacturing billions of cells a day).

The IMS has several sub-systems that detect, contain and destroy invaders and then clean out and repair after-wards. The metaphor of war, both overt and covert, applies well to the IMS. For example, there are surveillance cells (drones), antibody molecules (bullets) and killer cells (ground troops), message molecules, memory cells, and repair cells that participate in a highly complex and magnificently coordinated and sequenced symphony of events.

Many such battles are waged without symptoms or conscious awareness, as evidenced by tests that show we have had infections in the past without any awareness or concern, such as with herpes or influenza viruses. Only a small percentage of a population show the signs of an infection.

When we get “sick”, the fever, malaise, loss of appetite, and even the annoying itchiness, congestion and cough are evidence that the IMS is doing its job. In fact, people who are very sick and the elderly often do not get “sick” because the IMS is not working well. Other signs of a poorly functioning IMS is the persistence or recurrence of these symptoms and “being the first in a family or office to catch a cold”. Subtle or indirect complaints, such as cold sores, persistent rash, and gastro-intestinal complaints, and inability to handle stress, can be signs of battle.

We are born with a certain amount of “innate” immunity, which is provided by our genes, epigenes⁴ and our mothers during gestation and breast feeding. After birth, we develop an additional layer, called “acquired” immunity, in which the IMS is programmed to respond to new objects. That programming process is complex and involves the gastrointestinal, nervous, hormonal (especially

adrenal) and other systems³.

Inflammation

Inflammation is the process by which the IMS does its job. It is evidenced by the four classic “ors”: rubor (redness), tumor (swelling), dolor (pain) and calor (heat). Sometimes it is a sign of battle; other times the sign of repair. It is a necessary process that we sometime over-zealously suppress with medications.

Recently, science has demonstrated that low-level infections can lead to serious illness such as heart disease. The mechanism for this is that such infection triggers the IMS to cause a chronic, low-level inflammation, which then attacks many of our tissues, including the blood vessels to our hearts and brains. Hidden infections can occur in the teeth (old root canals and failed fillings), jaw, gut, sinuses, and other cavities.

Infections

We evolved to host hundreds of different organisms, comprising three pounds of gut contents and 90% of our cellular population. This ecology protects our surfaces, inside and out, and produces molecules that are nutritional but influence our IMS.

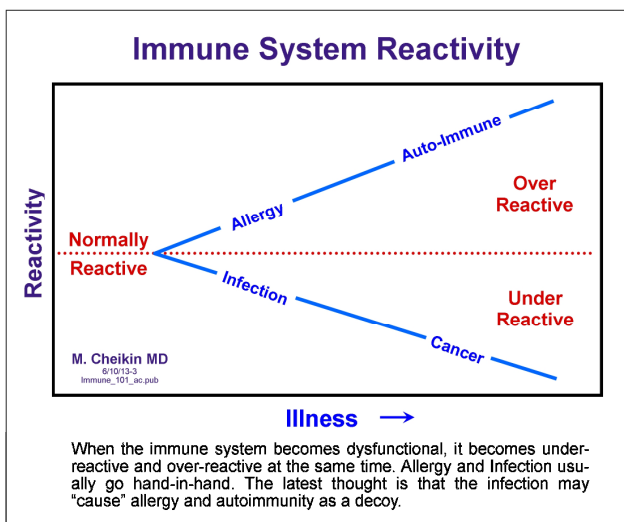
There are three accepted levels of presence, which we call “colonization”, “sub-clinical infection”, and “full-blown infection”. A fourth level, “stealth” is gaining recognition³.

When a single organism begins to dominate, this is called “infection”. The line between

colonization and infection is in some cases arbitrary. The organism is usually an unfriendly invader from the outside; however, it can come from within, out of “dormancy” such as when Herpes causes Shingles. Classically, we take antibiotics and vaccines to kill these organisms and to boost the immune system.

Some of the hope for the “magic bullet” of pharmaceuticals has evolved into cautiousness, since we have found that these chemicals not only kill the invaders, there is friendly fire. Treatment with antibiotics, NSAIDs (such as Motrin or aspirin) or steroids can alter this ecology, allowing for unhealthy bacteria and mold (such as Candida) to dominate this internal environment-- a situation called “dysbiosis”.

These critters were here 100’s of millions of years before us, and developed the hardware and software that run our cells. They know us better than we know ourselves. The “intelligence” of these critters can only be matched by the wisdom of the IMS. At the end of the day, the IMS must do its job and establish proper balance in order to achieve a lasting result.



When the immune system becomes dysfunctional, it becomes under-reactive and over-reactive at the same time. Allergy and Infection usually go hand-in-hand. The latest thought is that the infection may “cause” allergy and autoimmunity as a decoy.

Allergy and Autoimmunity

With allergies, the IMS reacts to “antigens”, specific molecules that often come from ragweed and tree pollens, dust mites, cats, foods or chemicals. This reaction is not innate, but is learned. Some process tells the IMS that this molecule is bad and must be destroyed or contained.

Detection of antigens turns on a complex cascade of events, often beginning with the release of histamine, which then triggers the common features of allergy and inflammation--itchiness, swelling, and redness. Conventional treatments for allergies include the use of anti-histamines, decongestants, and anti-inflammatories (NSAIDs and corticosteroids).

In autoimmune disease, the attack expands to specific tissues of the normal body. Examples of such conditions include: Thyroiditis (Hashimoto’s and Grave’s), Skin (Psoriasis, Alopecia, Vitiligo), Nervous System (Multiple Sclerosis), Joints (RA), Gut (Crohn’s and Ulcerative Colitis) and Blood Vessels (Lupus, PMR)³. The triggers that turn on this process include: genetics, age, sex, hormonal status, internal and external toxins, deficiencies, and stress reactions. Once turned on, this process often can’t be fully turned off. Conventional pharmaceuticals essentially suppress or wound the IMS so it doesn’t react as aggressively. Once a person has one auto-immune disease, they are at risk for a second--when the IMS is confused, that confusion usually worsens if it is not healed.

Under-Reactive, Over-Reactive and Confused

An important but obscure observation is that when the IMS goes awry, it typically goes in two directions at the same time--it becomes both over-reactive (allergy and autoimmunity) and under-reactive to things that it should respond to (infections and cancers). A new concept is that these conditions are intimately linked, in that these invaders make molecules that can both turn off immunity and can act as decoys⁵. They can also hide within cells or tissues and change their external surface to be unrecognizable.

Often it is hard to tell if we are infected, allergic, toxic, or properly fighting invaders through the inflammatory process. Such a process is sometimes called “die-off”, “healing crisis”, or “Herximer Reaction”.

The Latest on Allergy and Infection:

1. Stealth infections may exist despite negative testing for organisms, antigens, and antibodies.
2. Such organisms can both stimulate and suppress the IMS.
3. 50% of the IMS resides in the intestines, where its contents provides information about the environment that alters gene expression and programs IMS function. Allergy, autoimmunity and/or infection implies gut issues even without symptoms.
4. Some organisms block the production of stomach acid, which cause maldigestion of proteins, minerals and other nutrients, triggering food allergies and enabling infection.
5. Some degree of allergy and auto-immunity probably involves infections going “stealth” or “intra-cellular”. The symptoms can range from none to severe, depending upon whether the IMS is waging a war with inflammation, being invaded itself (such as with HIV), or

if the process produces toxins that affect the liver, adrenal glands, brain and gut.

6. Conventional strategies to “eradicate” “bad” organisms often backfire. Newer strategies including high doses of probiotics (by pill, food, and inoculation), tactics to change the environment in other ways (pH, oxygen), and to support the immune system, liver, gut and signal systems with specific nutrients and herbals.
7. Combining of antibiotics is well-established in conventional medicine. However, the inclusion of anti-yeast, anti-parasite and anti-viral agents, as well as the cycling of supportive agents is a new frontier.
8. Allergy, infection and autoimmunity are dynamic, web-like processes that can change with time and circumstance, for the better or worse.

Healing the Immune System

The ideal treatment of allergy and infection is holistic and multi-modal. No one pill or procedure will produce a “cure”. Sometimes, simply improving one's lifestyle, through good sleep, good nutrition (eliminating the bad and adding good supplements), exercise (walking, yoga, tai chi), and spiritual/meditative work can be very effective. Healing can be enhanced, or may require, the use of special diets (elimination, rotation), detoxification (through special supplements and other procedures) and energy/body-mind work (acupuncture, hypnosis, NAET, etc).

Knowing how to put these strategies together, in the proper sequence and quantities requires the use of highly refined observations on the part of the patient and practitioner. Both diagnosis and treatment involves the use of all available information including positive, neutral and negative responses to each change in intervention. While the principles are consistent from patient-to-patient, the implementation varies with each step utilizing the considerations discussed above.

IMPORTANT NOTES:

1. **This educational material should not be used to make decisions about medical care without the involvement of a knowledgeable practitioner.**
2. The contents of this article are copyright 2013 by Michael Cheikin MD and may not be reproduced without express written permission.
3. Dr. Cheikin's website, cheikin.com, has references and related articles on “Stealth Infections”, “Autoimmunity”, “Adrenal Fatigue” and others.
4. Epigenes are the software of the genes and modulate gene expression based on lifestyle and experience of the grandparents and parents.
5. “Molecular mimicry”, when an invader masks behind or creates such decoy molecules, is well established in classic medical literature.

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