UNDERSTANDING INFECTION: NOT A BATTLE, BUT A HOUSECLEANING

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I once saw a young African man in my practice who impressed me with his calm dignity and his radiant good health. I asked him what his parents had done when, as a child, he had come down with a fever. He replied that they had wrapped him in blankets to get him sweating. "Did they ever take your temperature?" I asked. He laughed and shook his head saying, "No, it was different from what is done here." We often hear that American medicine is the most advanced in the world. This is true in some areas of healthcare, but in other areas we could use a little of the deeply rooted wisdom that still informs some of the folk medicine in the developing world. I think this particularly applies to our modern concept and treatment of the illnesses we commonly call "infections."

When we come down with a cold or a flu most of us imagine that some stress or other has weakened our "defenses" or our "resistance" and allowed "a bug" (a virus or bacterium) to enter our body, where it multiplies and attacks us from within. We think of this as "an infection," that the new bug within us is making us sick, and that we will feel better as soon as our immune system has killed it off. When we don't feel better soon enough, we might seek remedies or antibiotics to kill the bug more effectively.

This pretty much describes the way almost everyone today, physicians included, thinks about what I refer to in this article as an acute infectious/ inflammatory illness like a cold, flu or sore throat.

Yet this commonly held picture does not correspond to the facts. It is a deceptive misunderstanding that in itself is a characteristic sign of the simplistic, weakened and fear-based thinking that hinders progress in many areas of life today.

If we define infection as the presence within us of foreign microorganisms i.e., bacteria and viruses, then all of us are continually infected from the day we are born until we die. We all harbor trillions of microbes all the time, including various disease germs, yet we only occasionally get sick. Most of us are quite happy to never or seldom come down with an acute infectious/inflammatory fever, cold or sore throat, thinking that we therefore must have a strong immune system which guards our body from becoming "infected."

That too is a deception, and a dangerous one, that fools us into thinking we are healthy when the reality is otherwise.

It is a shock to learn that for over one hundred years the evidence has shown that our immune system does *not* prevent us from becoming infected by germs. In the early years of Pasteur's germ theory in the nineteenth century, it was first assumed that healthy people were uninfected by bacteria and only sick people were infected. This assumption was soon disproven, as science found that the great majority of those infected with disease germs were healthy, and only a small fraction of them ever got sick. The majority of people infected with the bacterium of TB, for example, never got sick from tuberculosis, but only from the same coughs and colds that we all get.

Infection alone is not enough to make us come down with a manifest illness. Something else is needed. Most of the time we are able to live in harmony with certain numbers of disease germs in our body without becoming ill. For this blessing we can thank our immune system, which is continually vigilant and active below the surface of our awareness in keeping the extremely varied and extensive germ population of our body under control. Thus it is not necessarily the entrance of new germs into our body that makes us ill, it is the sudden and excessive multiplication of certain germs that have already been in us for a longer or briefer time. In some cases the entrance of a new germ into the body is quickly followed by its rapid proliferation and in other cases the germ can remain dormant or latent in us for many years or even a lifetime while we remain healthy.

This important fact receives far too little attention and is often totally forgotten in medicine today. Most of the trillions of germs that "infect" or inhabit our body from infancy onward are peacefully co-existing in us or even helping to maintain our inner ecological balance, like the acidophilus bacteria that live in our intestines. They are our "normal flora." Science has also identified a small minority of germs, called pathogens, that participate in human disease, like strep, staph, TB, diphtheria, etc., but these too have surprisingly more often been found peacefully coexisting in us rather than being involved in illnesses.

This is called latent or dormant infection, or simply the carrier state. Typhoid Mary was a famous example in the early 1900's of a cook who, though healthy herself, was a carrier of the salmonella bacterium and passed it on to others, some of whom became seriously ill and many others of whom remained healthy despite being infected. As the prominent microbiologist Rene Dubos stated in a 1950's textbook,

"...the carrier state is not a rare immunologic freak. In reality, *infection without disease is the rule rather than the exception....* The pathogenic [germs] characteristic of a community do commonly become established in the tissues of a very large percentage of normal persons and yet cause clinical disease only in a very small percentage of them." (Emphasis mine)¹

This leads us to the question which Rene Dubos, apparently alone among his colleagues, pondered for the rest of his life: if most of the time we are able to peacefully coexist with a disease germ in our body, (a fact which Pasteur did not adequately reckon with) what is it that happens when it suddenly starts multiplying rapidly and we get sick? Have our defenses weakened and allowed the germs to proliferate and go on the attack (which is the thought that frightens us so terribly) or are they merely multiplying because our body's biochemistry has been disturbed and is making available to the germs a suddenly increased supply of their preferred nourishment?

The latter is not a new thought; it was postulated by Pasteur's contemporaries. Scientists of Pasteur's time including Claude Bernard, Rudolf Virchow, Rudolf Steiner and Max Pettenkofer held the conviction that the decisive and determining factor in infectious diseases was not the microbe itself but rather the particular condition of the patient's "host terrain" that favored the growth of a particular microbe. In this view, microbes were not predators but were scavengers which fed on toxic substances produced by imbalance, disease and decay in the host body's terrain just as flies feed on dung and garbage. For these scientists, killing microbes without improving the host terrain imbalances that fed the microbes was like killing flies in a messy, untidy kitchen without cleaning up the kitchen. Pettenkofer even drank a test tube of virulent cholera bacteria to prove his point that they would do no harm if the inner terrain was healthy. Pettenkofer's terrain apparently was healthy, because he suffered no ill effects at all from his bacterial brew. Nevertheless, the germ theory was an idea whose time had arrived, and for many reasons the

concept of germs as vicious predators soon prevailed over the view that they were merely opportunistic scavengers.

The triumph of the germs-as-predators concept has led to a sea change in the way people think about acute illnesses such as colds, measles, pneumonia, scarlet fever, tuberculosis, typhoid, smallpox, etc. Since ancient times these illnesses had been called inflammations, literally meaning "a fire within." In the first century A.D. an early Roman author, Celsus, gave the classical definition of inflammation which is still taught today to physicians: a fire-like process in the body which manifests in "calor, rubor, tumor and dolor," i.e. warmth, redness, swelling and pain. These cardinal symptoms of inflammation, even when not externally visible, were understood to characterize all inflammations from a pimple to a pneumonia. Our ancient ancestors also knew from hard experience that many acute inflammations like plague, smallpox, measles, TB etc. were "catching" or contagious from one person to another. What they did not know was the intimate relationship of germs or microbes to these acute inflammatory and contagious illnesses.

Since Pasteur, we now erroneously consider these illnesses to be "acute infections," assuming that the entrance of a new microbe into the host's body (the infection) triggers the illness. As we saw earlier, it is *not* the initial entrance of, or the infection with, the microbe which triggers the illness, but rather the sudden proliferation of a microbe already residing in the host body for some time which initiates an acute infectious/ inflammatory illness.

Human beings become infected with a great variety of the microbes in their environment, continuing life-long as they change environments, yet this fact of life-long infection does not explain why illness happens, anymore than auto accidents are explained by the fact that the victims are life-long drivers. An infection is not itself an illness, rather it is the normal human condition and the context in which acute infectious/inflammatory illnesses occur. As we said earlier, something else must happen to cause a certain tribe of germs (like strep, with which almost everyone is infected to some degree) to suddenly proliferate and trigger what should correctly be called "an acute strep-related inflammation" rather than "an acute strep infection." We need to fit our thoughts and words to the reality. The fact that a strep infection might precede a strep-related inflammation by days, months or years is essential to understanding how and why illness happens. Thus, the term "acute strep infection" commonly used by physicians and lay people is

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incorrect, and it creates an incorrect picture in our mind of the illness at hand. The incorrect picture is that strep bacteria have invaded our body from the environment and are injuring us. Most importantly, this incorrect picture leads to inappropriate feelings and actions of the physician, the caregiver and the patient who must respond to an illness. Thus the grave mischief caused by a "mere" incorrect mental picture becomes enormous—such is the power of this idea. The consequences of the germsas-predators idea are millions of unnecessary prescriptions written for antibiotics, and thousands of injuries and deaths from drug reactions, including 450 deaths per year from Tylenol alone. The engine driving this inappropriate and dangerous use of antibiotics and anti-inflammatory drugs is the fear generated by our common misconception that we are under attack by predatory microbes whenever we experience fever, pain, congestion and other symptoms of typical acute inflammations such as coughs, colds, flu or sore throats.

Now we will move on to consider another important and common misconception about acute infectious/inflammatory illness. The first misconception was that infection is abnormal and causes illness, the truth being that infection is really the normal human condition because we all harbor disease germs frequently, yet become sick only occasionally.

The second misconception is that the symptoms of an acute infectious/inflammatory illness like scarlet fever, polio, smallpox or flu are caused by the viciousness, the virulence, of the bacteria or the viruses which we imagine are attacking the cells and tissues of our body. The sicker we are, that is, the more intense our symptoms, the more vicious we assume the attacking viruses and bacteria to be.

In over thirty years of practicing medicine, I've found that this assumption, shared by almost all physicians and their patients, provokes more unreasoning fear and unnecessary use of drugs than any other.

The confusion stems from the fact that in an acute infectious/ inflammatory illness we are witnessing not one happening but two polar opposite happenings which occur together. The first happening is that bacteria or viruses are proliferating in our body. If these microbes were predators, we would expect their proliferation to coincide with the worst of our symptoms, but this is not the case. Most of the germ proliferation, (which we falsely imagine as an inner attack), happens during the incubation period of the illness when we have little or no symptoms. Viruses and bacteria may enter our blood stream in large numbers, and may even start to leave our body, excreted in mucus and feces, without any awareness of illness on our part besides possible minor malaise, headache or tiredness. These symptoms might appear at the end of the incubation period during the few days of prelude or "prodrome" just before the full-blown illness begins. When the incubation period is over and the clinical illness comes on with all its strong symptoms of fever, pain, weakness, irritation and often anxiety, it may feel as if we are being attacked but in reality the inner process causing our illness symptoms is not a battle, but an intense housecleaning.

I've said that an infectious/inflammatory illness is a joint appearance of two separate and distinct happenings. These two happenings become related to each other in the context of the illness as a *reaction* is related to an *action*. Comparing illness to a housecleaning, the action is the gradual, mostly unnoticed accumulation of dirt and dust (along with the tiny creatures who make their home in dirt and dust) in the house, and the reaction is the sudden decision of the housekeeper to turn the house upside down in order to clean it from top to bottom. In a house, as in the human body, the housecleaning is a much bigger disturbance, though a necessary one, to the orderly routine of the household than the accumulation of dirt and dust.

Our immune system is the housekeeper of our body. Usually our inner housekeeper keeps well abreast of her work quietly, escorting dead and dying cells to the exits of our body and making sure that waste matter and poisons are cleared from the body. This is the very important ongoing maintenance-housecleaning work of our immune system-housekeeper in maintaining the health and integrity of our human organism. From birth until death, this ongoing maintenance work never rests, and is responsible for our keeping healthy and free of illness. But occasionally our immune system-housekeeper determines that a deep cleaning is needed. That's when the dust flies and we get sick! If you are wondering where the germs are in this comparison of the human body to a household, they are the flies, ants, cockroaches, or the mice which live in the house's inner recesses unreached by the housekeeper and which feed on the crumbs and kitchen scraps that accumulate in the house.

The function of the immune system is to create inflammation. Inflammation, as the word implies, is like a fire in the body which burns up the waste and debris, along with the germs which feed on waste and debris, and cleanses the body. Thus it is our immune system which causes us to become sick, by creating inflammation to drive out infection and renew us.

The first step in an acute infectious/inflammatory illness is the accumulation of cellular waste materials and toxic by-products of our body's biochemical metabolic processes. This accumulation may go on for hours or years before the acute illness, and is unnoticed by us because the body has various ways it can store toxic substances to keep them from irritating and poisoning us. The second step is the beginning of the release of certain toxins from storage and the proliferation of bacteria which are attracted to the now accessible toxins just as flies are attracted to garbage. This release from storage may be triggered by our exposure to an ill person to whose acute infectious/inflammatory illness we are open and unguarded. Thus we "catch" the illness and this second step defines its incubation period, in which bacteria or viruses rapidly proliferate while causing minor or no symptoms. This second step differs according to whether the illness is bacterial or viral. In a bacterial illness specific types of bacteria are attracted to the particular types of toxins released from storage and made available to them during the incubation period. In a viral illness the viruses themselves are a special form of toxic waste product which cells release when they are provoked by stress (as in an outbreak of herpes or shingles) or by "catching" an illness from another person.

These two steps, the gradual accumulation and storage of toxins for days or years followed by their rapid release from storage and the proliferation of microbes during the incubation period, constitute the *action* which provokes the third step, the *reaction* of the immune system to clean house. The intensity of the *symptoms* of our illness is a direct expression of the intensity of the *reaction* of our immune system. The stronger our immune system-housekeeper is, the more dust and debris she will stir up and the sicker we will feel.

If I am correct in asserting that an acute infectious/ inflammatory illness is really an intense housecleaning and not a battle against predatory invaders, then people with stronger immune systems and thus stronger housecleanings would be expected to have more intense acute inflammatory symptoms, and stronger discharges than those with weaker immune systems. By inflammatory symptoms I mean pain, redness, swelling and fever followed by a good discharge of mucus, pus, rash or diarrhea. In my medical practice I have repeatedly found that the stronger and more robust

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children become ill more intensely and acutely (with good outcomes nevertheless) than the weaker, pale and allergic children. I remember well one boy in my practice who, I later discovered, had a certain familial immune system defect. His mother often brought him to the office because he felt unwell and weak. Usually in children who complain of feeling sick, one can find some evidence of an inflammation in the body, a red throat, a red ear, congested lungs or sinuses, some degree of fever, swollen glands etc. In this boy I could find nothing. There were no signs of inflammation and no symptoms other than subjective fatigue and feeling unwell. Blood tests revealed a problem with his immune system.

This case brought home to me the fact that a weak immune system has difficulty *reacting* to a gradually accumulating infection of uncleared cellular waste and microbes in the body. *Without a strong reaction of the immune system, there is no acute illness*, but only a vague malaise and fatigue, which are symptoms of a low-grade poisoning or toxicity in the body – the result of our housekeeper being too weak to do her job and allowing kitchen debris to accumulate, followed inevitably by the flies and ants. When I would see this boy with the immune system defect in my office feeling unwell, it was as if he were stuck in the incubation period of an acute infectious/inflammatory illness, unable to become properly acutely ill because his immune system was too weak to react with the inflammatory healing crisis he needed to clear out his body.

Children who are able to have their normal childhood healing crises, consisting of fevers and discharges, thereby exercise and build their cellular immune systems to be strong and resilient, which is a great benefit for their overall health. Vaccinations, antibiotics and anti-inflammatory drugs like Tylenol and ibuprofen all interfere with this inflammatory cleansing of the body and the immune system-strengthening which results.

All the experts agree that antibiotics are massively overprescribed in the U.S. – used in conditions that don't require them. Why does this overprescribing continue unabated despite large efforts to educate physicians about the proper use of antibiotics? Upon reflection, any physician can answer this question because all of us see almost daily patients who come into the office seeking antibiotics. These patients have two chief concerns: either their symptoms are too intense or they've been going on too long, or both. If we understand the illness to be a housecleaning, then these concerns are very much minimized. "Your immune system is doing a good job – you will soon bring this healthy, much-needed housecleaning to a successful conclusion" is what a physician of the housecleaning persuasion might say.

If we believe the illness to be an attack of hostile predatory microbes, then physician and patient are both anxious to get rid of the symptoms along with the nasty microbes we mistakenly assume are causing the symptoms. As we saw earlier, the immune system, not the microbes, causes the symptoms. The microbes however are an important stimulus which provokes the immune system to react, causing symptoms of acute inflammatory illness. Therefore, when we kill or inhibit the microbes with antibiotics, we inhibit the immune system at the same time. This inhibits the inflammatory symptoms that belong to an active working immune system, creating the illusion that we have healed the illness when in reality we have suppressed the symptoms and interfered with the immune system's work before its job was done. This is a suppression, not a healing, and it is crucial to understand the difference between the two.

If we make our housekeeper stop her hectic cleaning in order to have some peace, we will have to put up with an untidy house. An untidy house and an inactive housekeeper are conditions which in the short run lead to a return of flies and ants, and in the long run lead to chronic disease and cancer.

This is why I've been saying for fourteen years that an important way to prevent cancer is to appreciate the great wisdom and benefit of our occasional inflammatory housecleanings and to refrain from obstructing them unnecessarily with antibiotics and anti-inflammatory drugs.

This point was recently confirmed by the publication of research showing that antibiotics increase the risk of breast cancer. Nevertheless, antibiotics are lifesaving drugs when an acute infectious/inflammatory illness becomes dangerous. This danger stems not from the intensity of the inflammation directly, but from the toxicity and the sheer volume of the metabolic wastes and poisons which are stirred up and mobilized by the inflammation. If our organism has the strength to clear out all these toxins and discharge them from our body, the illness usually resolves itself. If we lack this strength, then the discerning physician will attempt to support and promote the discharging, detoxifying process, keeping a watchful eye on the patient's strength, and will use an antibiotic if needed to prevent complications or death from the poisons that have been stirred up by our overzealous housekeeper – our immune system. This is a toxic or septic inflammation, and in such a crisis, an antibiotic is a blessing. But the likelihood of our ever having to experience such a toxic crisis will be greatly diminished if we understand how to allow all our smaller, non-threatening inflammatory crises to do their housecleaning work that our wise inner housekeeper knows we need.

How, therefore can one treat an acute infectious/inflammatory illness so as to work *with* the cleansing and discharging process of the immune system and not against it? I have discussed these practical pointers in the chapter "How to Treat Childhood Illnesses" in the book, <u>The Vaccination</u> <u>Dilemma</u> edited by Christine Murphy (<u>www.lanternbooks.com</u>) and also in an article published in Mothering magazine in July-August 2003 entitled, "The Healing Crisis: Don't Worry Mom, I'm Just Growing."

These treatment guidelines apply to adults every bit as well as they apply to children. They are designed to support and facilitate the work of the immune system, to relieve symptoms, prevent complications and to promote a successful outcome and completion of the task begun by the immune system itself. A more detailed discussion of these treatment guidelines can also be found, along with directions for use of the appropriate homeopathic/ anthroposophic remedies for specific symptoms, in my Home Remedy Kit available from the Weleda Pharmacy at 800-241-1030. Perhaps the most important points to remember in treating acute infectious/inflammatory illnesses are that *fever is good, toxicity is bad*, and *discharge of toxicity is very good*.

The danger of an acute infectious/inflammatory illness is not the 105 degree fever nor the yellow thick mucus drainage from the nose, but the amount of retained toxicity that is poisoning the patient because it is unable to be discharged from the body quickly enough. It is normal for the ill patient to be weak, lethargic and oversensitive. Symptoms of excessive retained toxicity poisoning the body include increasing irritability and restlessness, an increasing look and feel of desperation or anxiety, and a decreasing ability to maintain consciousness and eye contact. If these are happening, call the doctor.

Toxicity that is stirred up within the body more quickly than it can be cleared and discharged from the body is the primary danger and cause of complications in an acute infectious/inflammatory illness. We physicians should be advising our patients how to recognize and treat toxicity. Up to 106 degrees F, the degree of fever is *not* a sign of the seriousness of the illness, but is rather a sign of how strongly the immune system is working to detoxify and clear out the illness. Therefore it is best to avoid fever lowering drugs.

Here are some very effective age-old ways to support the immune system and to promote a good outcome of an acute infectious/inflammatory illness:

- 1. Total rest and sleep, with as little distraction as possible. No T.V., radio, tapes or reading.
- 2. Keep the patient very warmly dressed and covered. Sweating is good. Avoid chilling.
- 3. A liquid diet of vegetable broth, herb teas, citrus juices. Add rice, millet, carrots or fruit if hungry. Absolutely no meat, fish, eggs, milk products, legumes, beans, nuts or seeds. The digestive power of the body must focus on the illness and not be burdened with food.
- 4. Elimination through bowels, bladder and sweating is essential to treat toxicity and prevent its complications, therefore encourage drinking of lukewarm clear fluids, and use prune juice or Milk of Magnesia to promote loose BM's once or twice daily.
- 5. Provide a sick room environment with warm, soft colors and textures and natural soft light. Include plants and flowers. The caregiver should be cheerful, peaceful, attentive, observant, encouraging, loving and respectful of the profound healing wisdom of the inner housekeeper in which she is assisting.

¹ Dubos, Rene J., Bacterial and Mycotic Infections of Man. Philadelphia: J.B. Lippincott , 1958, P. 21-22

The author is grateful to Charlene Thurston, Christine Maggiore and Bob Dudney, M.D. for their kind help and advice with this article.

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