

## Virtual Mentor

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### OP-ED

#### What Primary Physicians Should Know about Environmental Causes of Illness

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Health and disease appear to have two main contributors—environment (which includes nutrition) and genetics. Since genetic manipulation is still in its infancy, medicine should devote energy to discovering what environmental triggers cause, exacerbate, and disturb bodily function. We all know that bacteria, viruses, and parasites can cause disease processes such as diarrhea, cardiac valvular disease subsequent to streptococcal rheumatic fever, arthritis, and pneumonia. Less is known about the more than 80,000 toxic chemicals in our air, food, and water that can cause adverse reactions to foods, (natural toxins and food sensitivity) and to airborne substances like molds, pollens, and terpenes (odors of plants and trees). These substances can also trigger the immune neurovascular system to initiate disease. The generalist should be aware of toxins in these three categories (air, food, and water); referring patients with possible toxin-related illness to an environmental specialist can prevent end-stage disease (e.g., organ failure of the brain, heart, lung, and spine).

Odor sensitivity can be the tip-off for a chemical or an environmental contributor to a patient's malfunction. Odor sensitivity can manifest as intolerance to perfumes, detergents, fabric softeners, newsprint, phenols, alcohols, natural gas, gasoline fumes, car exhausts, pesticides, formaldehyde, and cigarette and wood smoke. The clinician may also find odor sensitivity in some cases of asthma; vasculitis; autoimmune disease (lupus, scleroderma, rheumatoid arthritis, etc.); cerebral dysfunction; after anesthesia, surgery, and trauma; or in neuropathy and musculoskeletal disease.

A case in point is a woman who came to our clinic after having had her right first rib removed and a cervical sympathectomy. Following surgery, she immediately developed intractable atrial fibrillation that medications could not control; she had been treated with the usual anti-arrhythmic medications to no avail for 2 years. Subsequently she entered the Environmental Health Center in Dallas and was found to have five foods that triggered her atrial fibrillation—beef, cane sugar, yeast, wheat, and corn. She has avoided these substances for the last 5 years and has remained free of her atrial fibrillation without medication.

Chronic inflammatory diseases of unknown cause can often be a sign of environmental sensitivity or overload. Conditions such as thrombophlebitis, vasculitis, arthritis, colitis, Crohn's disease, esophagitis, and sinusitis can have triggering agents such as molds, foods, and chemicals. If these conditions continue to

recur in a patient, the environmental stimuli should be sought, found, and eliminated or treated with intradermal provocative neutralization therapy and proper nutrition.

Some patients who take medication such as insulin, anti-hypertensives, antibiotics, steroids, and thyroid medications for chronic conditions will become sensitive to their medication, then their substituted medication, and then to most medications. This sensitivity can spread to local, regional, and general anesthetics. Such patients also have immune deregulation. There may be changes in blood parameters such as T and B lymphocytes and their subsets—helper cells, suppressor cells, or natural killer cells. B cells may be suppressed. Gammaglobulins (IgE, IgA, IgM, or IgG) may be elevated or suppressed. The IgG subsets on 1, 2, 3, 4 may be suppressed, signaling the need for gammaglobulin injections.

Recurrent infections in the sinus, bronchi, throat, bladder, and vagina can have environmental causes or contributors. If a patient has more than two or three infections per year, triggering agents should be sought, and the environmental causes eliminated where possible. A Phagocytic Index may be drawn. This test—which demonstrates the ability of the neutrophils to engulf and kill bacteria and fungi, e.g., candida—has to be done after the patient has been off antibiotics for a minimum of 2 weeks. When the index shows reduced neutrophil ability to engulf and kill microorganisms, patients should be referred to an environmental medicine specialist for definitive treatment.

An example here is the case of a woman who developed sore throat four times a year, then sinusitis, bronchitis, and cystitis. After 3 years of suffering, she saw an environmental medicine specialist who found that her lymphocyte subsets and gammaglobulin were suppressed. She worked in a flower shop where many pesticides were used on the plants—an environment that caused her immune system to be suppressed, which resulted in the recurrent infections. After elimination of the daily pesticide exposures, her immune system returned to normal, and she has been infection- and antibiotic-free for the last 5 years.

Since 75 percent of the immune system and autonomic nervous system are in the gut, they are frequently disturbed by food sensitivities, food and water additives and preservatives, chronic medication use, mold and mycotoxin exposure, and even air pollution. When patients enter the generalist's practice complaining of abdominal bloating; sleepiness after eating; chronic gas; diarrhea or constipation; pain in the abdomen accompanied by a diagnosis of irritable bowel syndrome, duodenal ulcer or duodenitis; regional enteritis; or nonspecific colitis or Crohn's disease, food, food additives, drinking-water contaminants, mold sensitivity, mycotoxin overload, or air pollution should be considered as agents. Often elimination of a few agents solves the problem; however, many cases are more complicated and require the expertise of the environmental medical specialist, who is an expert in controlled environments, intradermal provocation-neutralization techniques, nutrition, and immune modulators.

The generalist should also be aware that chronic fatigue often has environmental elements and medication as triggering agents. These agents range from food and food additives to mold and mycotoxins, volatile organic hydrocarbons, heavy metals, particulates from African and Asian dusts, car exhausts, and factory and farm emanations. Any of these incitants can cause arrhythmias, heart failure, GI upset, cerebral dysfunction, fibromyalgia, and neuropathy. Often they cause or propagate chronic fatigue, which then progresses or is prolonged for years. Recurrent fibromyalgia often accompanies chronic fatigue with pain in the muscles and spasm, which often responds to magnesium compounds like magnesium citrate, gluconate, glycinate, or chloride in doses of 500 to 1,000 mg per day. Diarrhea is the limiting factor in this type of treatment. Successful treatment comes in eliminating as many triggering agents as possible. Often, molds and mycotoxins cause chronic fatigue and fibromyalgia.

An example here is a man whose office became extremely moldy. He developed chronic fatigue and fibromyalgia, which became incapacitating. Mold cultures in the office showed high levels of *Aspergillus niger*, ochratoxins, and stachybotrys. Mycotoxin levels in his urine showed elevated levels of aflatoxin, ochratoxin, and tricothecene. Intradermal skin tests proved positive for the three molds and mycotoxins. He eliminated his exposure by moving his office to a mold-free area and received subcutaneous neutralization shots for the offending molds and mycotoxins, intravenous and oral nutrients, and heat depuration (sauna) therapy. After 3 months' treatment, he was again vigorous, free of fatigue and fibromyalgia.

Sometimes patients with chronic fatigue or peripheral and central neuropathy who have short-term memory loss, headaches, and dizziness are unable to walk a straight line with their eyes open or closed and cannot stand on their toes. They may have high venous oxygen-extraction levels, which indicates the inability to extract oxygen in the tissues even though oxygen exchange across the lung membrane is from 95 to 100 percent. Frequently, there is enough oxygen in the tissues to keep the patient alive but not enough for optimum function. Such patients need extended oxygen therapy.

There are many more examples of chronic diseases with air-, food-, and waterborne toxin contributors. In general, when a physician has been treating chronic or recurring ailments without success or is stumped regarding the cause or exacerbating agent in a patient's condition, that physician should seek the consult of, or refer the patient to, an environmental medical specialist.

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