

Electrical Sensitivity as an Emerging Illness

by Lucinda Grant
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What is electrical sensitivity? Perhaps you are already familiar with multiple chemical sensitivity (MCS) whereby the patient develops symptoms from exposure to ordinary levels of synthetic chemicals in common use such as perfumes, pesticides, and household cleaning products.

Electrical sensitivity (ES), another environmentally triggered illness, produces symptoms in the patient exposed to common levels of electromagnetic fields (EMF) from electrical sources in the environment: power lines, motors, computers, etc. ES patients often are also MCS patients. Other at-risk groups for developing ES seem to be chronic fatigue syndrome (CFS) patients and those experiencing mercury toxicity from dental amalgams.¹ Because the nervous system is a primary site impacted by both chemicals and electromagnetic fields, those with nervous system damage from toxic exposures seem more susceptible to becoming ES too.^{2,3} Also, overexposure to EMF can singularly bring on ES, independent of other illness. Historically, ES was known as radiowave illness or microwave sickness.⁴

A Medline computer search under electromagnetic fields and microwaves will locate several hundred references regarding health effects from these exposures. Electrical sensitivity, now also called electromagnetic hypersensitivity, are both listed on Medline as well.

In a recent ES survey, the five most common symptoms experienced when EMF exposed were skin itch/rash/flushing/burning and/or tingling, confusion/poor concentration and/or memory loss, fatigue/weakness, headache, and chest pain/heart problems.¹ Skin problems and memory difficulties tied for first place among the overall symptoms. Less commonly reported symptoms included nausea, panic attacks, insomnia, seizures, ear pain/ringing in the ears, feeling a vibration, paralysis, and dizziness. Some ES patients experience only one symptom when EMF exposed, but often more than one symptom is apparent.

The importance of being aware of electrical sensitivity in the health care setting becomes clear when you realize that a patient may be suffering symptoms from electromagnetic exposures similar to the way a cardiac pacemaker may malfunction when exposed to certain EMF exposures. The typical doctor's office is a minefield of EMF exposures such as computers, fluorescent lights (particularly energy-efficient lighting), and medical tests that require exposure to electromagnetic or ultrasound sources. Magnetic resonance imaging (MRI) has been especially troublesome for some ES.

Because computer monitors can cause EMF reactions in the patient waiting area, the ES patient may check in for their appointment, then let the office know they will wait outside for the nurse to call them in. Also, fluorescent lighting may need to be turned off in the examining room, substituting an incandescent lamp or natural daylight instead. The most electrically sensitive patients have great difficulty even getting to the doctor's office, as a ride in a car can overexpose them to the motor's electromagnetic fields. They may ask in advance to meet the doctor outside at the appointment time.

Once a patient realizes that proximity to electrical sources is the triggering event that leads to their symptoms, they find EMF avoidance most helpful for reducing reactions. Unfortunately, with the advent of increasing wireless technology, such as cellular phone service and paging systems, EMF avoidance is becoming very difficult for the ES, creating more suffering and leading to life-threatening consequences for the severely ill. The chemical sensitivity equivalent of this wireless technology might be aerial pesticide sprayings, a life-threatening event for many MCS patients.

In the past, if daily computer use at work caused, for example, a skin rash and headache, a cause and effect relationship could be determined by noticing that these symptoms abated evenings and weekends and intensified at work. It would become clear that the workplace, at least, was responsible for the development of the symptoms. Whether the computer was the source could be checked by using that

computer or other computers in other locations to see if symptoms would then reappear. If not, it may be a "sick building" problem in the workplace instead, due to chemical exposures.

For the newly ES, it will now be more difficult to pinpoint the cause of their symptoms if they are also reacting to the ambient EMF exposure from various wireless services. The new digital cellular is particularly troublesome for some ES; the prior analog cellular - a lower frequency - was much less of a problem.

Electrical sensitivity is more well-known in Europe than the United States, due in part to Sweden's active support group, FEB, which has about 2,000 members. Sweden has been particularly hard hit with ES, primarily related to computer use rather than MCS there. Computer-related skin problems are frequently reported by their group.

In February 1997, the American Academy of Environmental Medicine co-sponsored an international symposium called Bioelectricity which included electrical sensitivity (ES) among the topics presented.⁵ This gathering was the fourth international conference specifically highlighting ES. Others were sponsored by the European Union (EU) in Graz, Austria (1994), and the support group Danish Association for the Electromagnetically Hypersensitive in Copenhagen, Denmark (1994 and 1995).^{6,7}

Lucinda Grant was director of the national support group Electrical Sensitivity Network and author of the books *The Electrical Sensitivity Handbook* and *Workstation Radiation*.

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