James L. Oschman PhD, in Energy Medicine (Second Edition), 2016

Prudent Avoidance

In the 1980s, several personal electromagnetic shielding devices were developed – based on the use of coils of the Möbius design that emit scalar waves – that were said to be safe for living systems. One of these devices was a watch containing a microchip that produced a Schumann-type signal at about 8.0 Hz. This device purportedly stabilized a person's brain waves at a frequency that was considered safe and beneficial. Many of these devices were sold, and there were reports of benefits from wearing them, including reduction of jet lag, more energy, lower blood pressure, and feelings of well-being. These qualitative effects have been difficult to document.

Rein (1998) has summarized more recent work on the biological effects of scalar waves. Scalar waves can inhibit neurotransmitter uptake into nerve cells and stimulate the growth of human lymphocytes. There are indications that the effects are in part mediated by effects on the properties of cell and tissue water.

More powerful emitters of scalar waves, in the range 6–60 mW power consumption, have been developed (Abraham, personal communication, 1998). The devices emit scalar waves at the average Schumann frequency, 7.83 Hz. Preliminary tests indicate that scalar waves at this frequency are safe and protect those who suffer from electromagnetic field sensitivity. Moreover, preliminary clinical trials indicated a variety of health benefits, including improvement of symptoms of chronic fatigue syndrome, fibromyalgia, cognitive impairments, and sleep disorders (Abraham, personal communication, 1998).

The development of a reliable and powerful source of potential waves opens up many possibilities for studies of the clinical effects of this form of energy, and, possibly, for resolving some of the mysteries and variability of both local and non-local biological effects.

There is widespread confusion and misinformation about our electromagnetic environment. Key information widely available in technical circles is virtually unknown to the general public. This is due to several factors that reinforce each other. One is the strong bias many biologists have against geophysical pacemakers for biological rhythms. This bias arises in part because evidence of this sort might be taken as support for astrology, a subject that is widely considered to be scientifically unfounded (see, however, Seymour, 1988). Another is the threat to the ego posed by the possibility that our lives might be influenced by events very far away from us. The idea that the human body both radiates and is sensitive to invisible energy fields may be menacing to some. Finally, a documentation of health effects from fields generated by power distribution systems and technological devices have enormous economic and legal consequences. The

Therapists are careful to make their treatment spaces as pleasant and comfortable as possible. But what about the ubiquitous invisible energies present in the treatment environment? No matter how well you treat individuals with electromagnetic or geopathic sensitivities and related disorders, they will continue to have problems when they go back to their homes and/or workplaces where they are immersed in disturbing energy fields. Treating the whole person involves education about the possible health effects of the invisible electromagnetic environment so that suitable precautions can be taken.

These considerations are of increasing importance for a variety of reasons that have been discussed here. Moreover, the likely physiological effects of environmental fields have been more widely researched than many people realize. Virtually every disease and disorder has been linked by one investigator or another to electromagnetic pollution. As one example, Sobel and colleagues have noted an elevated risk of Alzheimer's disease among those who work in areas where they are exposed to high electromagnetic fields (Sobel and Davanipour, 1996; Sobel et al., 1995a,b).

Preliminary clinical trials with devices that shield against electromagnetic pollution show relief from a wide range of symptoms, suggesting that those problems may actually be caused or aggravated by electromagnetic pollution. Whether these correlations will stand up to long-term research is unknown, but enough information is available on electromagnetic bioeffects to have led the U.S. government to warn that prudent avoidance is a good policy until more is learned. At present we do not know what constitutes a 'safe limit' for electromagnetic field exposure. It is interesting that the Russian standard for maximum safe microwave exposure to avoid changes in brain activity is 1000 times less than the U.S. legal maximum.

Low-cost detectors of magnetic fields are available, and these devices are invaluable for those who wish to get a better appreciation of the fields present in their homes and workplaces. One of these devices (TriField from AlphaLab) is reasonably inexpensive and combines magnetic, electric, and radio/microwave detectors. The magnetic section has three detecting coils oriented in the three directions of space, which is important. With such devices, one can locate the 'hot spots' in the home and work environment, such as near electric blankets and heaters, fluorescent lights, light dimmers, microwave ovens with bad seals, cellular phones, computers, televisions, transformers, and motors in devices such as refrigerators and clocks. Sometimes moving furniture, cribs, or beds a short distance can significantly reduce long-term exposure.

Some people have taken steps to rewire their homes and workplaces to reduce the levels of 50- or 60-Hz magnetic fields. Simple changes in wiring configuration can make an enormous difference in the levels of magnetic fields in the home (Maxey, 1991). However, Abraham, personal communication (1998) has cautioned that any method of field cancellation, such as twisting conductors together, can lead to the generation of undetectable 50- or 60-Hz scalar waves that could also have serious health effects. Obviously, we have much to learn about our electromagnetic environment and its relations to therapeutics.

Avoidance of geopathic stress is also important. Hall (1997) presents some techniques, and dowsers are also a good source of suggestions.

Therapists are being introduced to a variety of devices that are promoted as shields against electromagnetic pollution. The consumer must be cautioned, however, that it is easy to be deceived in a situation where the effects are invisible and unmeasurable and benefits are subjective. At present, the best way to assess such devices is by testing on a person who has electromagnetic sensitivity. This may seem unscientific, but there is a good precedent for it. Many of the important discoveries in biology began with sensitive biological assays in which the strength of an unknown compound or other factor is estimated by testing it on a living system. This is called a bioassay (e.g., Glass, 1973). The 'confrontation–neutralization technique' used by Choy and colleagues (1987) to study electrical sensitivities in allergy patients is a form of bioassay. The construction of an effective shield against electromagnetic effects is technically challenging and will be greatly facilitated when reliable detectors of scalar waves have been developed. Some researchers are developing devices that absorb environmental signals and convert them to beneficial frequencies. And Earthing or grounding has been shown to reduce induced electrical fields (discussed in Chapter 17).

Electromagnetic Environment