

## Environmental Radiation Modulates Symptoms in Human Immune Disease

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Experiments demonstrating any effect of microwave radiation on the human brain have been difficult to perform and replicate. Here we present two preliminary studies which show that difficulties arise both because the brain is 1000 times more sensitive to microwaves than previously thought possible, and effects on the innate immune system can have an onset delay of hours, with a persistence of days.

We have pioneered an immuno-stimulative therapy in chronic disease which uses retargeted Olmesartan to reactivate the VDR nuclear receptor. We decided to investigate Electromagnetic Hyper-Sensitivity (EHS) in our slow-responders. First, we produced a single circuit board 30cm x 3cm capable of generating the 'Skalarwellen' reported by K. Meyl. We distributed more than 70 of these units to volunteers from our cohort of mixed inflammatory diagnoses. Emitting 27MHz 'Capacitive Waves' at a power of only 25nW (< -100dBm at 1m) we were surprised that subjects were reporting effects at a rate much more prevalent than the typical 3% incidence of EHS in a standardized population. Reports ranged from induction of mania to remission of idiopathic pain. Subjects likened their responses to effects they associate with Immunopathology. Responders had a variety of diagnoses, including Sarcoidosis, CFS, Fibromyalgia and MS.

We then found that shielding the brain and brain-stem with silver-threaded hoods can help identify the EHS threshold. Our 'sleeping cap' is basically a sewn bag enclosing the head down to the nape of the neck, with an opening for the eyes, nose and mouth. Chronically-ill individuals typically become sensitive to environmental Transverse Electro Magnetic (TEM) radiation at levels between -75dBm and -60dbm ( $1 \mu\text{watt}/\text{m}^2$ ). EHS experiments have customarily been carried out at the much higher levels prevalent in modern cities (above -40dBm), which are strongly immunosuppressive.

This extreme sensitivity of the human brain to EM radiation suggests that the body may be using EM waves in endogenous signaling processes.