

Case studies of the effect of the Teslar watch on the Autonomic Nervous System as measured by Heart Rate Variability (HRV) [March 2003].

Dr Nyjon Eccles PhD MRCP

The Chiron Clinic, Harley Street, London, UK

Objectives

1. To study the influence of Teslar on HRV at rest
2. To study the influence of Teslar on mobile phone-induced perturbations of HRV

Methods

HRV was assessed using the Stresserve Time Domain-based system and the Nerve Express System (Time Domain and spectral analysis of HRV). A single chip and a double chip watch were applied to 2 subjects (both females in their 30s) after measuring their baseline HRV. This measurement was then repeated at 3 day intervals over a period of 15 days to observe the effect on each individuals unchallenged autonomic nervous system balance.

HRV was also assessed in the same individuals exposed to a live mobile phone with and without a Teslar watch applied to their left wrist.

Results

Baseline HRV in both subjects was reasonably good and did not appear to alter significantly whilst wearing the Teslar watches after 2 weeks. Both subjects reported increased sense of well-being and Subject 1 reported a distinct improvement in sleep quality.

Introducing a mobile phone caused reduced parasympathetic activity in subject 1 and reduced sympathetic and increased parasympathetic activity in Subject 2 (this subject unlike the other displayed no autonomic reaction to postural challenge while the first subject had a rise in sympathetic and a reduction in parasympathetic activity). The same subjects with mobile phone exposure but with a Teslar in situ both displayed different reactions. Subject 1 had a shift to increased parasympathetic activity with the 2 coil watch. Subject 2 with a single Teslar coil, had a slight reduction in parasympathetic activity but no change in sympathetic activity.

Conclusions

Taken together these results did not show an effect of Teslar on baseline HRV readings over a 2 week period. However, because both subjects had a reasonably balanced HRV to begin with, this may have masked any positive effect of the Teslar. When the autonomic nervous system was stressed by exposure to a mobile phone the Teslar appeared to have a stabilizing effect in one subject and beneficial stimulation of parasympathetic regulatory system activity in the other. Whilst this is only a case study it confirms the findings of other earlier research suggesting a protective effect of Teslar on autonomic nervous system perturbation created by an ambient electromagnetic field as from a mobile phone.