

EMFs

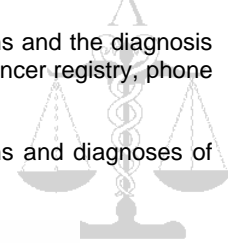
PD Nelson et al. *Neurology* (2006) Vol. 66 p 284.

Trends in acoustic neuroma and cellular phones: Is there a link?

This brief paper provides powerful evidence against any link between mobile phone use and the development of acoustic neuroma.

The report provides simple information on the number of mobile phone subscriptions and the diagnosis of acoustic neuroma (AN) in the UK. Diagnostic data was taken from the national cancer registry, phone subscription data were taken from published sources.

The following graph shows the temporal relationships between phone subscriptions and diagnoses of AN.



The graph clearly shows that increases in diagnosis rates occurred before the widespread availability of mobile phones. The peak in diagnosis is not matched with any earlier peak in phone subscriptions.

Comment

Temporality is a key component of any test of causation. The gross trends in this graph indicate no possibility of any causal link between use of mobile phones and AN.

On very close inspection, the data could support a causal link between exposure and AN if: the people who first bought mobile phone subscriptions were also highly selected for their susceptibility to AN and that a very high proportion of all those who were susceptible and would ever subscribe became subscribers between 1987 and 1993 and the latency period was around 8 years. In our view, this combination is exceptionally unlikely.

Coexisting trends in exposure and diagnosis can occur quite by chance.

A peak in phone subscriptions is expected before 2010. An associated peak in AN diagnosis would be expected 10 to 20 years later, depending on models of pathogenesis and latency. Some studies suggest that the delay between first symptoms of AN and its diagnosis can be up to 30 years but 15 years is typical; symptoms would not be expected for at least 5 years in most cases.