HAMI/TSP attributable to blood trans- fusion

A multi-centric case-control study was carried out to clarify possible environmental factors related to the onset of HTLV-I-associated myelopathy, tropical spastic paraparesis (HAM/TSP) in northern Kyushu, Japan, which comprises one of the most prevalent areas of HTLV-I in the world. The frequencies of blood transfusion before the onset of HAM/TSP were 33% (6/18) among male patients and 18% (12/67) among female patients, which were significantly higher than 8% in males and 9% in females in the general population. The age-adjusted summary odds ratios with 95% confidence intervals were 7.0 (2.9–17.0) for males and 2.4 (1.3–4.5) for females. The percentages of population attributable risk of HAM/TSP attributable to transfusion were estimated to be approximately 29% (5–52) for males and 11% (1–21) for females.

The fraction of HAM/TSP attributable to transfusion after the introduction of blood screening for HTLV-I in effect since 1986 in Japan, was definitely smaller than that before the programme. Our observations seemed compatible with a marked decline in newly diagnosed HAM/TSP patients after its introduction, which may be part of the benefit of blood screening. Neither smoking nor drinking was related to the risk of HAM/TSP.


Suppression of motor neuron firing by transcranial magnetic stimulation in a patient with multiple sclerosis

Transcranial magnetic stimulation produces a short latency excitatory response in tonically active single motor units in small hand muscles. The latency of the short latency response may be part of the mechanism of action of the drug lamotrigine. The effect of lamotrigine on short latency responses was studied in a patient with multiple sclerosis. A 16-year-old woman with multiple sclerosis was studied before and after a 3-month course of lamotrigine. The latency of the short latency response was significantly reduced after lamotrigine.

There is increasing interest in the use of transcranial magnetic stimulation in the treatment of multiple sclerosis. The effect of lamotrigine on short latency responses was studied in a patient with multiple sclerosis. A 16-year-old woman with multiple sclerosis was studied before and after a 3-month course of lamotrigine. The latency of the short latency response was significantly reduced after lamotrigine.

The latency of the short latency response was significantly reduced after lamotrigine.

Figure Peristimulus time histogram constructed from the discharge of a single tonically active motor unit from FDI, recorded with a concentric needle electrode. Magnetic stimuli were delivered at time = 0, on 120 trials. There is a distinct period of zero firing probability with an onset latency of 34 ms and a duration of 47 ms. No excitatory peak is seen.