

Viking voyages: the origin of multiple sclerosis?

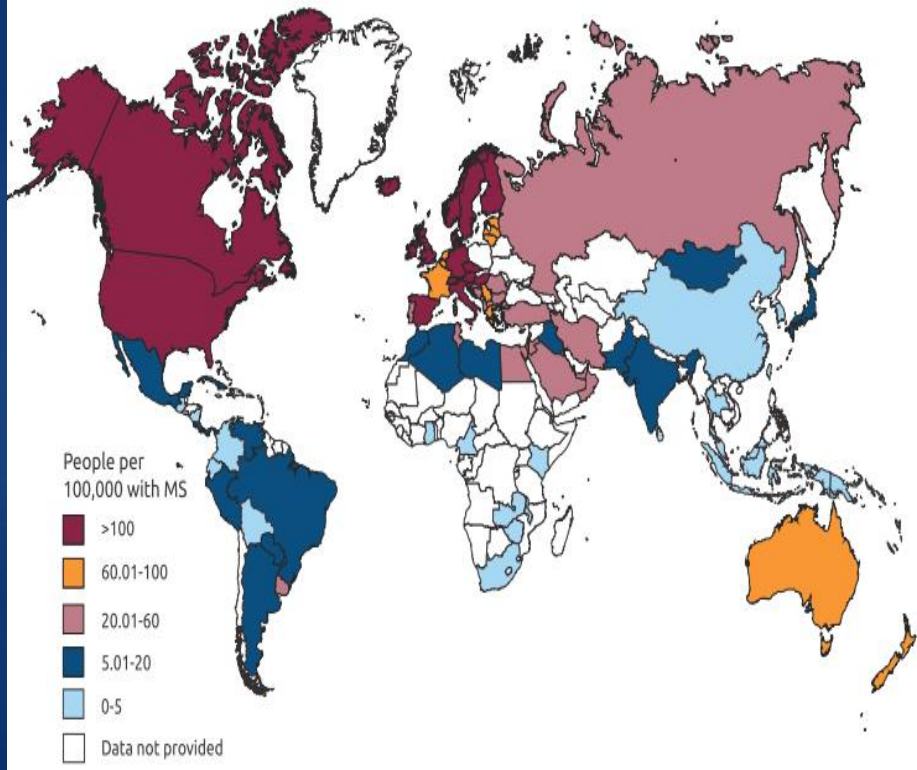
An essay in medical history

Poser M. Viking voyages: the origin of multiple sclerosis? An essay in medical history.
Acta Neurol Scand 1995; Suppl. 161: 11–22

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PREVALENCE BY COUNTRY (2013)



- ▶ The ‘Viking theory’ suggests that the distribution is strongly linked to the spread of Scandinavian genes, initially by the Vikings and later by a second wave of Scandinavian migration.

Vitamin D and exposure to sunlight

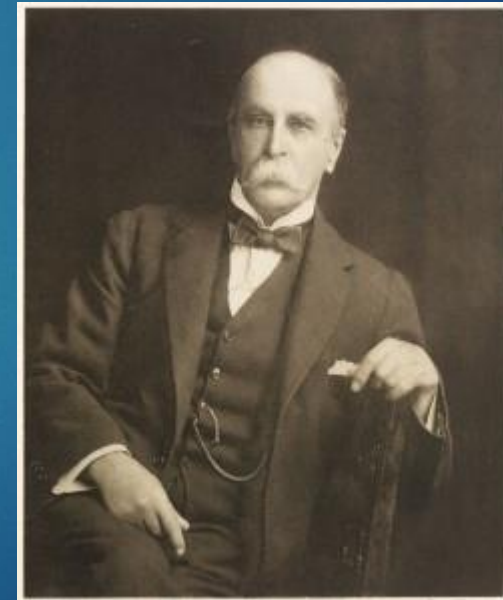
- ▶ Another important environmental factor, which has a strong association with the risk of MS is sunlight exposure and vitamin D levels, with a high likelihood of them playing a role in a prenatal period.
- ▶ That hypothesis is based on the close relationship between geographical differences in sunlight exposure and the influence of latitude on MS worldwide prevalence, the direct effects of sunlight exposure on serum vitamin D levels and the immunomodulatory effects of vitamin D on cells homeostasis.

William Osler

To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all

The value of experience is not in seeing much, but in seeing wisely

-Osler



Video- 24 year old girl
1 week hx of double vision



3 weeks later after IV Methylprednisolone



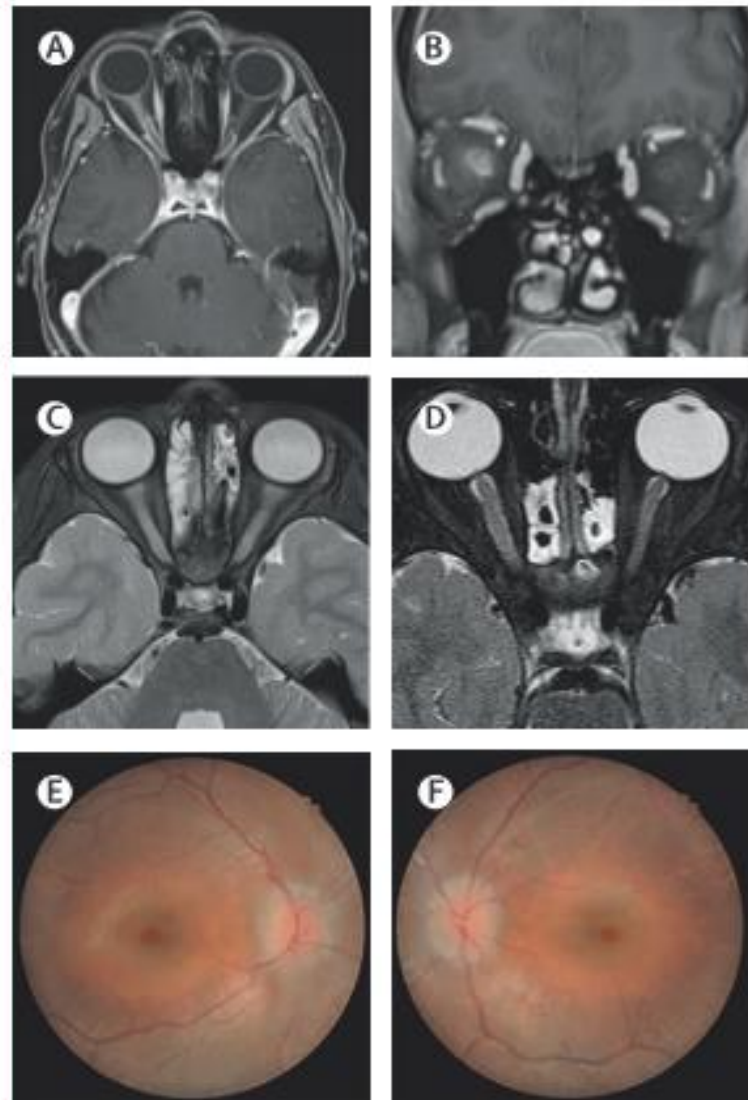
MS symptoms (not relapses)

Residual symptoms from previous relapses or non-relapse-related symptoms:

- ▶ Fatigue
- ▶ Pain, spasticity ,spasms, Ataxia
- ▶ Uhthoff's phenomenon- **Pseudorelapses**
- ▶ Depression, anxiety, rarely psychosis
- ▶ Bladder dysfunction
- ▶ Seizures
- ▶ Memory problems, cognitive issues

MOGAD

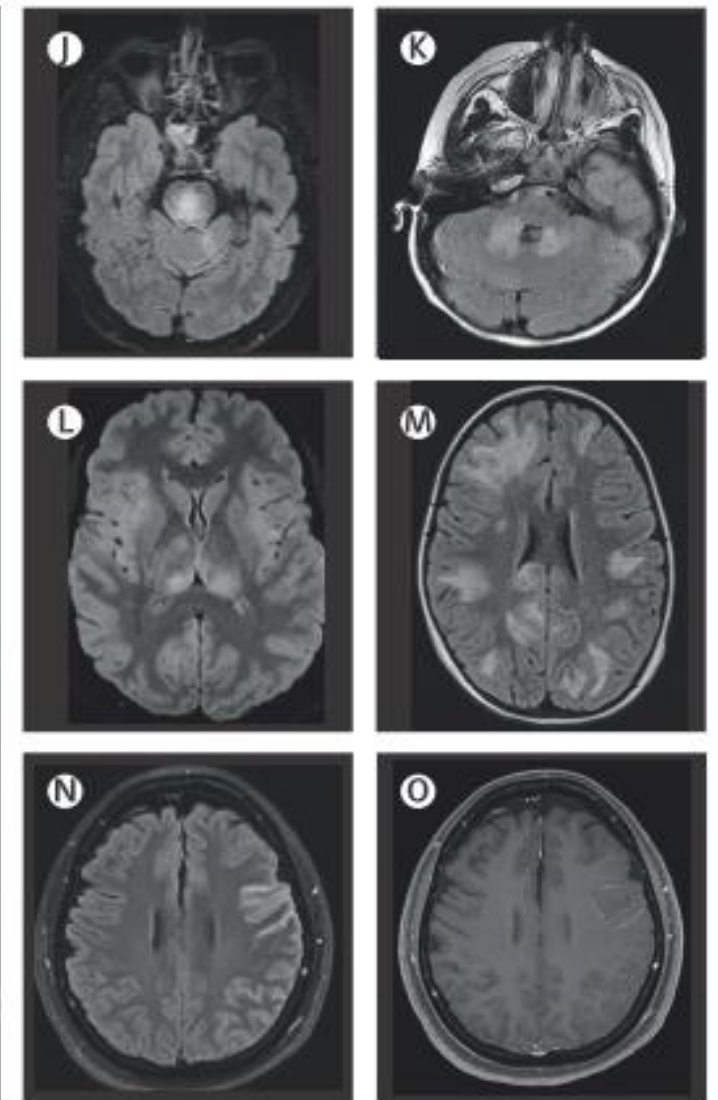
Optic nerve



Spinal cord



Brain



Demyelination Secondary to systemic diseases

Ischemic/inflammatory...

- ▶ Non-specific Age-related WM changes- **UBO's** !
- ▶ Small vessel disease
- ▶ Migraine,
- ▶ Vasculitis (SLE, APLA syndrome*, Sjogren's , Behcet's)
- ▶ Infection (Lyme disease)
- ▶ Sarcoidosis, Susac's syndrome
- ▶ B12 deficiency/ Hyperhomocystinemia

*Livedo reticularis



Ufo overview

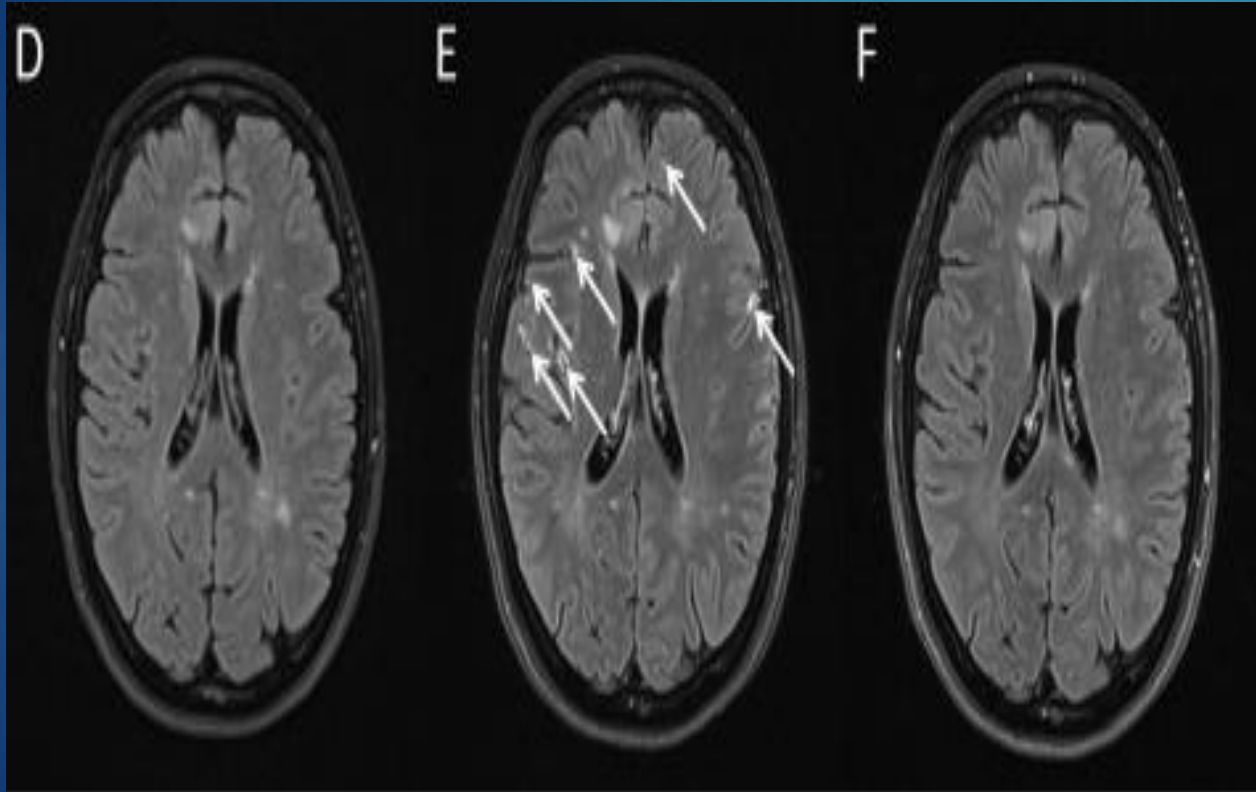


- What is a UFO ?
- Is there really any evidence of UFOs ?
- Do Eye witness reports count ?
- What about Alien abductions ?
- Is it a Government Conspiracy ?
- What about crop circles ?
- What about other evidence ?

DMT and infections

DMT	VZV/HSV	TB	PML	Hepatitis B reactivation risk	Rates of serious infections versus comparator in phase 3 trials*
Teriflunomide	Low	Moderate†	Low	Low	No excess
Dimethyl Fumarate	Low	Low	Moderate	Low	No excess
Fingolimod	Moderate	Low	Moderate	Low	No excess
Cladribine	Moderate	Moderate†	Low‡	High	Small excess
Alemtuzumab	Moderate(Low with prophylaxis)	Moderate†	Low‡	High	Small excess ^{39 48 49 212}
Natalizumab	Low	Low	High	Moderate	No excess
Ocrelizumab	Moderate	Low	Low	Very high	No excess
Ofatumumab	Low	Low	Low	High	No excess

VZV



MS and Pregnancy

