Answer to medical quiz: image

1. Optic neuritis.
2. MRI of brain shows hyperintense ovoid lesion perpendicular to ventricle (Dawson fingers, Figure 2) and bilateral symmetrical hyperintense lesion adjacent to ventricle (Figure 3).
3. Multiple sclerosis.
4. Cerebrospinal fluid (CSF) study to see oligoclonal band (OCB) and visual evoked potential (VEP).

REVIEW

Multiple sclerosis (MS) is an autoimmune-mediated neurodegenerative disease of the central nervous system characterized by inflammatory demyelination with axonal transection.[1] There is increasing incidence and prevalence of MS in both developed and developing countries the underlying cause of which remains uncertain.[2] MS is a complex disease; many genes modestly increase disease susceptibility in addition to several well defined environmental factors, in particular vitamin D or ultraviolet B light (UVB) exposure, Epstein–Barr virus (EBV) infection, obesity and smoking.[3] Multiple sclerosis has historically been classified as an organ-specific T-cell mediated autoimmune disease. However, the success of B-cell targeted therapies challenges the standard T-cell autoimmune dogma.[4] Red flags include a first relapse at an older age, where vascular disease is more likely. In those from low prevalence areas and/or ethnic minorities, differential diagnoses must be carefully considered, as neurosarcoidosis, neuromyelitis optica spectrum disorder and infections such as tuberculosis are more likely. The diagnosis of MS remains clinical. However, treatable mimics should be excluded using paraclinical investigations where indicated like CSF study, MRI brain, visual evoked potential etc. The treatment of MS can be divided into disease-modifying therapies that tend to be MS-specific and symptomatic therapies that are often used in different disease areas to treat symptoms resulting from neurological dysfunction.[5]

REFERENCES

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