Hospital Angeles
TIJUANA

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I have evaluated Jana Narendra, a 34-year-old man diagnosed with multiple sclerosis relapse-remission but more recently secondary progressive.

There is no significant family history, no diabetes mellitus, no high blood pressure, no tobacco, no allergies or recent traumas. He is a non drinker and non recreational drug user and never has been historically. His records indicate normal developmental milestones and above average aptitude prior to clinical presentation of MS.

The clinical manifestations that began in 2009, with sensory and motor symptoms (he presented with a lack of physical feeling along his inner palms, face, and legs with occasional immobility from late 2008 to 2012), and presenting with T1 intensities in the basal ganglia bilaterally and a small region of hypointensity noted to the right of the fourth ventricle on T1 weights images in a December 18· 2008 MRI. He was untreated for MS from 2009 to 2015, but his 2012 brain MRIs shows atrophy of his posterior brain during this period of time. An image of his optic nerve taken in 2012 shows optic neuropathy, the optic disk being pale in both eyes.

He does have seizures, without having semiology, his EEGs on March, 2016 show the focal point of sharp waves over the posterior, temporal, and prefrontal brain lobe. His EEGs show "interictal epileptiform discharges from the right hemisphere of the brain with a predominance to fronto-temporal region". At that time it was thought that probably secondary effect of MS.

I evaluated him for the first time on June 27, 2017 with sensory and motor symptoms that affect the function of the left side of the body, with a decrease in the visual acuity of the left eye that occurs due to the relapse of symptoms in April 2017.

The physical examination found blood pressure of 120/80 mmHg, heart rate of 70, weight of 50 kg. Conscious, reactive, with diminished visual acuity of left eye, strength 5/5 on the right side, 4/5 on the left side, decreased sensitivity of the left half of the body, generalized 2+ reflexes, with slight dysmetria and left dysdiadochokinesia.

During his clinical evolution, Jana has required administration of methylprednisolone four times in ER due to relapses characterized by exacerbation of sensory and motor symptoms, last time a month before plasmapheresis is performed in September 14, 2018. His ER presentations are similar in presentation with "hypoactive reflexes, slowed finger to nose, altered physical sensitivity and difficulty walking" and "fixation ocular disturbance and nystagmus, hypoesthesia entire left body halftone, decreased reflex status left" and "finger-pointing" difficulties are examples. Plasmapheresis is performed in Mexico City due to inefficacy of methylprednisolone and the treatment is followed up with Tecfidera 240 mg 2 times per day. He has several brain magnetic resonances, cervical and dorsal spine showing generalized volume decrease, with more evidence in the cervical spine. He also has studies of visual evoked potentials where left optic neuritis and optometry study showing optic neuropathy in both eyes reported in August 2018.
There are T2 lesions typical of MS along his posterior brain, corpus collosum, and mild features of Dawson's in his MRIs from September to current MRIs. Prior to giving methylprednisolone there were also contrast enhanced T1 intensities in his August, 25· 2017 MRI along his cervical column and globus pallaladus bilaterally similar to the 2008 MRI which responded to an application of methylprednisolone. The response is reduced T1 intensities in his September 2017 brain and cervical MRIs.

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He also has FDG PET in March, 2016 that show evidence of hypometabolic activity of bilateral posterior parietal lobes, temporal lobes, precuneus and posterior cingulate gyrus suggesting neurodegenerative of these regions with secondary effect of Multiple Sclerosis.
A neuropsychological report dated August 11th 2018 indicates reduced processing speed with his executive functioning and decision making mostly preserved. Tests for visual attention and task switching is below cut off. Tests with respect to global functioning, memory functioning, attention span, and language are average.

His condition worsened by December of 2018 and it was determined by a comparison of several MRI images from August 2017 to December of 2018 (brain and cervical spine) that that he suffers from secondary progressive MS.
Another VEP done in January shows bilateral optic neuritis, correlating well with his presentation of secondary progressive MS.

With the progression of his condition he consulted with several hospitals in Europe and finally presented his case to a neurologist in New Delhi, India; Dr. Pushpendra Renjen, whose neurology team determined that he does indeed have secondary progressive MS. The doctor repeated the VEP test and showed that his optic neuropathy is also progressing, bilateral with significant delays in both eyes. He was administered Rituximab at a dose of 1 gram separated by 2 weeks (January 15th and 29th of 2019) and has been progressively recovering since January of 2019 with his condition stabilizing with the more clinically effective medications (monoclonal antibodies).
His next IV of rituximab is scheduled on July or August of 2019.

Actually, Jana is currently stable due to Rituximab, with an EDSS 1.5 scale, under medical treatment and surveillance.

Considering the progressive nature of his MS I consider it important to continue with follow-up studies such as MRI of the brain, cervical spine and thorax with gadolinium every 3 to 6 months, general laboratories every 2 months to evaluate liver, kidney and blood function and not to suspend its established treatment.

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