9/29/20 Morning Report with @CPSolvers

Case Presenter: *Kiara Camacho (@kiaracamacho96)* ***Case Discussants:*** *Mohamed Elashwal (@m7mdwezza) and Marco Malaga (@MarcoMalaga97)*

CC: Change in behaviour + memory loss.

HPI: 66yM who presented in outpatient clinic concerned about change in behaviour + memory loss for 1 month that had gotten worse. Episode catalogued as "stress" and patient was discharged. Went to Europe w/family. Here he continues w/ the same complaints and develops a R sided hemiparesis that resolved in <24h. Next day he had LOC. During episode he aspirated secretions. developed pneumonia and had to be intubated.

In Lima, he developed apraxia, aphasia and was stuporous and was intubated.

PMH:
DM
Ischemic stroke previous year.

Meds:
Metformin

Fam Hx: NA
Soc Hx: NA

Health-Related Behaviors:
Past smoker. Quit after stroke last year.

Allergies: NA

Vitals: **T**: **HR**: **BP**: **RR**:31 **SpO_2**: 92% intubated
Exam:
Gen: Bad shape. Pale.
HEENT: Pupils isocoric and hyporeactive to light.
Neuro: Stuporous w/ fentanyl drip. L upper limbs hemiparesia. Could localize pain. Reflexes normal. → L upper and lower limbs Hemiparesia → 5th day bilateral myoclonus persistent and unresponsive to meds, Babinski +, GCS 11 off sedation, almost unresponsive to commands. Akinetic mutism.

Later developed tonic-clonic seizure with eye deviated to R side. Respiratory distress and had to be intubated. Babinski +

Notable Labs & Imaging:
EEG:Inconstant brain activity. Diffuse encephalopathic response w/no paroxistic activity. Generalized sharp waves prominent over frontal region w/ocasional lateralization R side and w/background of delta and theta waves.

MRI -Flair: Hyperintensity in head of both caudate nucleus on medial and lateral side of frontal cortex. Old ischemic lesion in internal capsule.

LP: Positive for 14-3-3 protein - suspicious for CJD.
(After 30d) 2nd MRI Flair: Compensatory dilation of ventricular system secondary to cortical atrophy and hyperintensity of insular and frontal cortex.

Final DX: CJD. Patient passed away after 21 mo.

Problem Representation:
66yM w/ PMHx of ischemic stroke presented w/ behaviour changes and memory loss which rapidly deteriorated to unresponsiveness, hemiparesia, seizures and akinetic mutism. PL positive for 14-3-3 protein with atrophic changes and hyperintense lesions in MRI ultimately made diagnosis of sporadic CJD.

Teaching Points (Andrea):
- Mnemonics for causes VITAMINS ABCDEK :Vascular, Infective, Trauma, Autoimmune, Allergy, Metabolic, Idiopathic, Iatrogenic, Neoplasia, Social, Alcohol, Behavioral, Congenital, Degenerative, Drug, Endocrine or Exocrine, Karyotype
- Change in behaviour can be language problem, memory loss (short memory is frontal),
- Encephalitis
  -Days: infection, encephalitis,autoimmune, NMDA
  -MONTHS: mass GBM, meningioma, autoimmune,
  -More chronic: dementia. Frontotemporal dementia, chronic,
- Progressive Vascular Dementia: not always stepwise declining
- Up to one-third of patients treated with metformin can experience decreased vitamin B12 absorption from the gut, which, with time, can result in lowering of the blood level of this vitamin
- Hashimoto encephalopathy: Subacute onset of confusion with altered level of consciousness, seizures, and myoclonus. Immune-mediated disorder
- Rapid progressive vascular dementia: stroke after stroke, lymphoma., AF, endocarditis
- Generalized+focal+seizures: Cerebral amyloid angiopathy-related inflammation
- Creutzfeldt-Jakob disease (CJD): Neurodegenerative disorder most commonly presenting with rapidly progressive dementia and neurological signs and symptoms, with death usually occurring within 1-2 years of symptom onset. The most common human prion disease and is a type of transmissible spongiform encephalopathy (TSE). Caused by a conformational change of normal cellular prion protein (PrPC) to a pathogenic isoform (PrPSc).CJD is the most common human prion disease and is a type of transmissible spongiform encephalopathy (TSE). You can see everything in this disease. For Dx CSF real-time quaking-induced conversion (RT-QuIC)