

Developing topics

Rapidly progressive dementia in the COVID-19 era

Shubham Dubey¹ | V Ramakrishnan¹ | P Naveen¹ | Ayush Dubey²¹ MMCH & RI, Kanchipuram, India² AIIMS, Bhopal, India

Correspondence

Shubham Dubey, MMCH & RI, Kanchipuram, India.

Email: shubham_dubey@rediffmail.com**Abstract**

Background: Rapidly progressive dementias (RPD) are conditions that typically cause dementia over weeks or months.¹ Due to the current COVID-19 pandemic, it has become difficult for dementia caregivers on the one hand, and relevant detailed examination and management in the hospitals worldwide, on the other. Recent studies show that ApoE e4 genotype is associated with both dementia and delirium². Hence further research into the possible genetic link between dementia and COVID-19 is the need of the hour.

Method: We studied two elderly male patients, aged 66 and 68 years, presenting with memory decline of recent events, untimely and non-sequential Activities of Daily Living and apathetic along with way finding difficulty and errors in money transactions. One patient also had forgetfulness of handwashing and face hygiene measures, and of using preventive face masks in public places as advised for public health during COVID-19 outbreak. On examination, vitals were stable and normal fundus examination with no fever, dry cough or tiredness, and no evidence of Increased Intracranial Pressure (ICP). MMSE score was 16/30 and 17/30 respectively, recent memory and visuospatial skills were impaired and slowness of activities were present. Motor examination was normal, with no focal or non-focal neurological deficit or sensory impairment. All routine tests were normal. Neuroimaging with contrast in one patient showed well defined hyperdense mass lesion of size 4.0*3.5*3.0 cms. showing heterogeneous contrast enhancement in left parieto-occipital lobes with moderate perilesional edema suggestive of astrocytoma (intermediate type).

Result: High index of suspicion of Space occupying lesions should be made in the background of RPD even in the absence of focal or non-focal neurological deficit or without signs of raised ICP.

Conclusion: Most of the etiologies causing RPD especially surgical causes, if diagnosed early and promptly are reversible and treatable. The double hit of dementia and COVID-19 pandemic necessitates further research globally. References: 1) Paterson RW, Takada LT, Geschwind MD. Diagnosis and treatment of rapidly progressive dementias. *Neurol Clin Pract.* 2012;2(3):187–200. 2) Kuo C-L, Pilling LC, Atkins JL, Kuchel GA, Melzer D. ApoE e2 and aging-related outcomes in 379,000 UK Biobank participants. medRxiv [Internet]. 2020: 2020.02.12.20022459.

Dementia and COVID-19 = Double Trouble

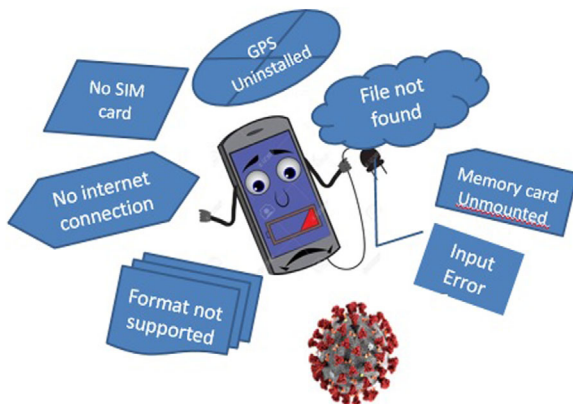


FIGURE 1

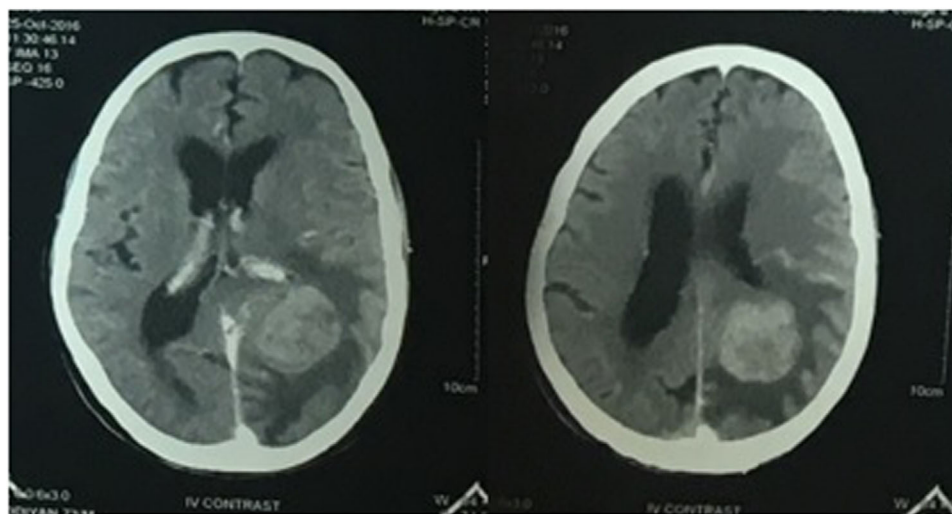


FIGURE 2