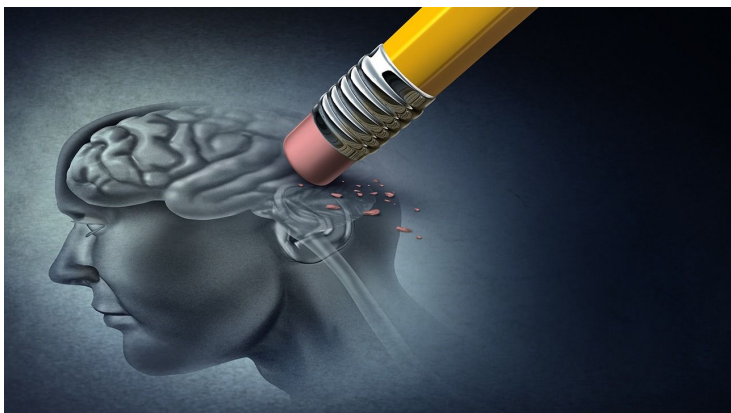


IICB explores neuro-invasive potential of SARS-CoV-2

24 June 2020 | News

The scientists have suggested that cerebrospinal fluid of COVID-19 patients and postmortem brain of deceased patients should be assessed



The team of researchers at CSIR-Indian Institute of Chemical Biology (IICB), Kolkata has explored the neuro-invasive potential of SARS-CoV-2 and suggested that the virus may infect respiratory centre of the brain and attention should be focused on the respiratory centre of the central nervous system to search for mortality due to COVID 19.

The paper published in ACS Chemical Neuroscience and supported by Science & Engineering Research Board (SERB), a Statutory Body of the Department of Science & Technology (DST), implies that SARS-CoV-2 virus might enter the human brain through the nose and reaches the olfactory bulb of the brain.

From there, SARS-CoV-2 virus might infect PreBötzing complex (PBC), the primary center of the brain that controls the respiratory rhythm generation. This explains that collapse of the respiratory center in the brain may be responsible for breakdown of COVID-19 patients.

Team of researchers Dr. Prem Tripathi, Dr. Upasana Ray, Dr. Amit Srivastava and Dr. Sonu Gandhi discussed that although, lung is one of the most infected organs, several other organs, including the brain, are also affected.

This is the first report that highlights the SARS-CoV-2 may target the PBC of the brainstem that controls respiration and causes respiratory collapse of COVID-19 patients.

The scientists have suggested that cerebrospinal fluid of COVID-19 patients and postmortem brain of deceased patients should be assessed to better understand the route of SARS-CoV-2 entry and its spread to respiratory center of brain.