Twitter Thread by Covid Fact Check **▶**■





"Our results point toward direct interactions between the N-protein of SARS-CoV-2 and α -synuclein as molecular basis for the observed coincidence between SARS-CoV-2 infections and Parkinsonism."

"Interplay between α-synuclein amyloid formation and membrane structure." https://t.co/sC76XFXnqR

"we reported that a short-degraded peptide fragment 1 (DPF1) derived from native HIV-1 envelope protein gp120-loaded rat hepatocytes, formed fibrils by self-assembly and thus enhanced HIV-1 infection by promoting the binding of HIV-1 to target cells." https://t.co/bzlr2ot5pV

"peptides derived from the HIV-1 gp120 co-receptor binding region, which are defined as enhancing peptides (EPs), could form amyloid fibrils and remarkably enhance HIV-1 infection." https://t.co/l6lwvPVaJw

"Increased Frequency of α-Synuclein in the Substantia Nigra in HIV Infection." https://t.co/3p4AwAtT0k

"cerebral hypoperfusion accelerates amyloid- β (A β) accumulation and is linked to tau and TDP-43 pathology, and by inducing phosphorylation of α -synuclein at serine-129, ischaemia may also increase the risk of development of Lewy body disease." https://t.co/IX9YjTxwul

"SARS-CoV-2 causes brain inflammation and induces Lewy body formation in macaques." https://t.co/lv4juGiws7

HIV associated dementia may cause:

- Poor concentration
- Forgetfulness
- Slowed movements
- ·Personality changes.

This condition is known as HIV associated dementia and affects around 50% of people with HIV.

■ https://t.co/6hQjJZEHQu

"by promoting pathways involved in AD/ADRD neuropathogenesis (e.g., triggering amyloid β, Tau, or α-synuclein accumulation)." https://t.co/9Tjeducx9H

"The diminishing α -synuclein reactive T cells correspond with a switch of role from cellular protective to a pathogenic one. It is highly likely that inflammation is likely to exert both a protective and pathogenic role." https://t.co/wmBoJvZVax

"Around 5% of the HIV-infected patients develop parkinsonian-like symptoms. It initiates an inflammatory reaction that subsequently leads to activation of microglia in the basal ganglia, SN α -synuclein expression (in 16% of the HIV positive cases, dopaminergic dysfunction, and

and progressively damages the blood-brain barrier, similar to that observed in PD."

"In a French study, 84% of the intensive care SARS-CoV-2 infected patients exhibited neurological symptoms and 79% exhibited delirium or acute encephalopathy. In contrast, others reported only 16.5%."

"Interestingly, Fazzani and colleagues reported antibodies to coronavirus in the cerebrospinal fluid of PD patients, thereby suggesting the involvement of an infectious agent and/or the inflammatory system in the pathogenesis of the illness."

"The presence of the SARS-CoV-2 virus in various areas of the brain including the cerebrum, cerebellum, and olfactory bulb endorses its involvement in the neuropathological changes exhibited in the brain. The most common finding is microgliosis (42.9%) similar to PD, thereby

reflecting the involvement of inflammatory processes in cell death."

"Together, these results demonstrate that macrophages/microglia act as HIV reservoirs and utilize a novel mechanism to prevent HIV-induced apoptosis." https://t.co/uhSZijOywt

"the cross-talk between healthy neurons and microglia modulates HIV expression, while HIV expression impairs this intrinsic molecular mechanism resulting in the excessive and uncontrolled stimulation of microglia-mediated neurotoxicity." https://t.co/G69dDjWWlg

"HIV is thought to enter the CNS early during infection, primarily through infected lymphocytes and monocytes crossing the BBB." https://t.co/uRgvh5c7Lg