

Supplementary Material 1

Summary of case reports dealing with neurological manifestation among COVID-19 population (not in the systematic review)

Study	Age	Sex	Comorbidities	Symptoms	Neurological symptoms (at any stage of the infection)	CSF (SARS-CoV-2)	Brain imaging	EEG	D-Dimer ($\mu\text{g/L}$)
(Al Saiegh et al. 2020)	62	Female	NA	Na	Hemiparesis, aphasia	Negative	Left IPH		
(Al-Olama, Rashid, and Garozzo 2020)	36	Male		Fever, headache, cough, digestive symptoms	Fatigue, impaired consciousness	Positive	Right frontal iph, meningoencephalitis		790
(Avula et al. 2020)	73	Male	Carotid stenosis, hypertension	Fever, dyspnea, digestive symptoms	Impaired consciousness		Left parieto-occipital stroke		Not evaluated
	83	Female	Diabetes, hypertension	Fever	Speech impairment, left facial paresis				Not evaluated
	80	Female	Hypertension		Impaired consciousness, hemiparesis, aphasia		Right MCA stroke		>1000
(Bernard-Valnet et al. 2020)	64	Female		Cough	Myalgia, seizure, psychotic symptoms	Negative	Negative	Focal status epilepticus	
	67	Female		Mild respiratory	Impaired consciousness, hemianopsia, hemineglet	Negative			
(Beyrouti et al. 2020)	64	Male	Nil	Cough, dyspnea, fever	Myalgia, speech impairment, hemianopsia, ataxia		Left pica stroke, bilateral pca stroke		> 80000

	53	Female	Cardiovascular disease	Cough, dyspnea	Impaired consciousness		Left cerebellar and right parieto-occipital stroke		7750
	85	Male		Cardiovascular disease, hypertension	Dysarthria, hemiparesis		Left pca stroke		16100
	61	Male	Hypertension, previous stroke		Dysarthria, hemiparesis		Right striatal stroke		27190
	83	Male	Cardiovascular disease, diabetes, smoking		Dysarthria, hemiparesis		Right M2 stroke		19450
	73	Male			Speech impairment, hemiparesis		Bilateral PCA stroke		1080
(Camdessanche et al. 2020)	64	Male	Nill	Fever, cough	Guillan-Barré	Negative			
(Dinkin et al. 2020)	36	Male		Fever, cough	Myalgia, Miller-Fisher syndrome		III CN altered signal		
	71	Female		Fever, cough	Diplopia	Negative	Optic nerve altered signal		
(Dixon et al. 2020)	59	Female	Aplastic anemia	Fever, cough	Headache, seizures, impaired consciousness	Negative	Multiple hemorrhages		2033
(Gutiérrez-Ortiz et al. 2020)	50	Male	Nil	Cough, fever	Miller-Fisher syndrome, headache, anosmia, dyseusis	Negative			
	39	Male	Nil	Digestive symptoms, fever	Polyneuritis cranialis, dyseusis	Negative			
(Heman-Ackah et al. 2020)	58	Female	Diabetes, lupus	Fever, cough, dyspnea	Progressive cognitive deterioration, coma		Left frontal IPH		

	46	Male	Hypertension, OSA	Fever, cough, dyspnea	Coma at day 13		Left frontal IPH		
(Hepburn et al. 2020)	82	Male	Cardiovascular disease, CKD, COPD, venous thromboembolic disease	Dyspnea	Impaired consciousness, right partial seizure			Bilateral fronto- temporal seizures	590
(Moriguchi et al. 2020)	24	Male	Nil	Fever, pharyngodynna	Headache, fatigue, seizure	Positive	Ventriculitis and encephalitis		
(Ottaviani et al. 2020)	66	Female		Fever, cough	Guillain-Barré syndrome	Negative			
(Padroni et al. 2020)	70	Female		Fever, cough	Guillan-Barré syndrome	Negative			Normal
(Pilotto et al. 2020)	60	Male	Nil	Fever, cough	Impaired consciousness	Negative	Negative	No epileptic activity	968
(Rábano- Suárez et al. 2020)	63	Male		Fever, dyspnea	Anosmia, myoclonus	Negative		No epileptic activity	4784
	88	Female	hypertension, hypothyroidism, hypopituitarism		Myoclonus			No epileptic activity	867
	76	Male		Fever	Anosmia, dysgeusia, myalgia, myoclonus			No epileptic activity	18239
(Sedaghat and Karimi 2020)	65	Male		Cough, fever, dyspnea	Guillan-Barré, facial paresis		Negative		
(Scheidl et al. 2020)	54	Female	Nil		Modified Guillain-Barré, anosmia		NA		

(Sohal et al. 2020)	72	Male	Cardiovascular disease, diabetes, hemodialysis for CKD, hypertension		Seizure			Left temporal focus	
(Somani et al. 2020)	49	Female	Psychiatric disorder, rheumatoid arthritis		Status epilepticus			Midline and left frontal seizure	
	73	Female	CKD, diabetes mellitus, encephalocele, obesity	Dyspnea	Status epilepticus			Bilateral frontal seizure	
(Toscano et al. 2020)	77	Female		Fever, cough	Guillain-barre syndrome (sensory -motor axonal subtype)	Negative			
	23	Male			Facial palsy, dysgeusia, Guillain-Barré syndrome (sensory -motor axonal subtype)	Negative			
	55	Male		Fever, cough	Guillain-barre syndrome (acute motor axonal)	Negative			
	76	Male			Guillain-Barré syndrome (demyelinating)	Negative			

	61	Male		Cough	Guillain-barré syndrome (demyelinating), anosmia, dysgeusia	Negative		
(Zanin et al. 2020)	54	Female			Anosmia, dysgeusia, dizziness	Negative	Diffuse demyelination signs	Fronto-temporal seizure
(Zayet et al. 2020)	68	Male	Obesity		Impaired consciousness	Negative	Negative	
	39	M		cough, dyspnea	anosmia, dysgeusia, headache, dysarthria, impaired consciousness		negative	

CKD chronic kidney disease, CN cranial nerve, COPD chronic obstructive pulmonary disease, IPH intraparenchymal hemorrhage, OSA Obstructive sleep apnea

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