

	Variable	No hyperfusion of the colliculi (n=60)	Hyperperfusion of the colliculi (n=12)	P value
Demographic variables	Gender (number of males)	37(62%)	10(83%)	0,196
	Age	62,5	64,9	0,463
	BMI (kg/m2)	29,4	29,5	0,948
	Presence of cardiovascular risk factors	33 (55%)	8 (67%)	0,536
Symptoms	Headaches	11 (18%)	3 (25%)	1
	Seizures	0 (0%)	3 (25%)	0,004
	Anosmia, ageusia	5 (8%)	0 (0%)	0,582
	Pyramidal tract signs	15 (25%)	3 (25%)	1
	Impaired consciousness	29 (48%)	6 (50%)	1
	Agitation	18 (30%)	4 (33%)	1
	Confusion	25 (42%)	4 (33%)	0,751
Evolution	Number of days between first symptoms (mainly respiratory) and first brain MRI	30,63	30,07	1
	Length of hospital stay (days)	51,51	53,4	0,873
	Length of ICU stay (days)	27,05	30,2	0,633
	Lower PaO2/ FiO2	133,7	124,4	0,546
	Deaths	5 (8%)	1 (8%)	1
Treatment	Hydroxychloroquin	19 (32%)	6 (50%)	0,319
	Lopinavir/Ritonavir	17 (28%)	6 (50%)	0,180
Brain MRI	Presence of MRI abnormality	32 (53%)	10 (83%)	0,063
	leptomeningeal enhancement	13 (22%)	7 (58%)	0,016
	White matter microhemorrhages	11 (18%)	4 (33%)	0,258
	Multifocal and circumscribed FLAIR white matter hyperintensities	8 (13%)	2 (17%)	1
	Diffuse white matter FLAIR hyperintensities	6 (10%)	2 (17%)	0,613
	Ischemic stroke	6 (10%)	4 (33%)	0,056
	FLAIR hyperintensities involving the mesial temporal lobe	3 (5%)	1 (8%)	1
	PRESS	0 (0%)	0 (0%)	1
	Focal enhancement	2 (3%)	0 (0%)	1

Biology	Hemoglobin at admission (g/dL)	12,2	11,3	0,116
	Leukocytes count at admission ($10^9/L$)	7,52	11,07	0,002
	Highest CRP during hospitalization (mg/L)	227	200	0,486
	Lowest platelets rate during hospitalization ($10^6/L$)	206912	188333	0,582
	Worst D Dimers during hospitalization ($\mu\text{g/mL}$)	9,33	9,71	0,881
	AST at admission (UI/L)	57,5	54,1	0,804
	ALT at admission (UI/L)	62,0	56,8	0,700
	PCR SARS-CoV-2 in CSF	2/30 (7%)	0/7 (0%)	1