



The Open Microbiology Journal

Supplementary Material

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Viral Molecular Testing of Cerebrospinal Fluid in Adults with Suspected Central Nervous System Infection in an Italian University Hospital Laboratory: a Retrospective Study on 1462 Consecutive Patients

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Supplementary Table 1. Description of which viral PCRs were prescribed and of their positive (number in bold character) and negative result for each testing set approach (intended as number of tests requested on the sample). Data are reported as overall values for all patients who had the same number of PCRs tested. Empty cell: not included in diagnostic workflow.

PCRs (n)	EV	HSV	VZV	CMV	EBV	HPeVs ^a	WNV	HHV- 6	TBE	HAAdV ^b	HHV- γc	HHV- 8	JCV	ME A	MUM V	HTLV-1	PvB19
1 (29 pts)	1 /0	4 /24															
2 (50 pts)	1 /8	0 /46	5 /14	0 /4	0 /3	0 /3	0 /2	0 /1	0 /1	0 /1	0 /2		0 /8			0 /1	
3 (99 pts)	0 /41	1 /93	3 /46	1 /44	0 /35	0 /12	0 /8	0 /3	0 /3	0 /1		0 /1	0 /2			0 /3	
4 (259 pts)	1 /122	7 /249	6 /217	1 /140	8 /124	0 /97	0 /19	0 /9	0 /8	0 /11	2 /1	0 /3	1 /8		0 /1		
5 (172 pts)	6 /96	5 /161	2 /139	0 /97	3 /97	0 /71	0 /77	0 /14	0 /32	0 /22	0 /2	0 /2	1 /20	0 /1	0 /1	0 /9	1 /1
6 (210 pts)	11 /15 3	5 /200	5 /181	0 /176	7 /161	0 /142	0 /64	1 /19	0 /54	0 /24	0 /8	0 /8	2 /25	0 /3	0 /2	0 /4	0 /5
7 (169 pts)	5 /130	4 /162	5 /146	1 /149	3 /151	0 /112	0 /65	1 /50	0 /61	0 /39	0 /30	0 /26	1 /24	0 /6	0 /4	0 /4	0 /4
8 (90 pts)	4 /74	1 /87	3 /82	1 /85	1 /79	0 /64	1 /51	0 /34	0 /47	0 /32	0 /17	0 /18	0 /24	0 /3	0 /1	0 /6	0 /5
9 (112 pts)	4 /88	4 /108	2 /102	0 /108	5 /91	0 /78	0 /59	1 /84	0 /61	0 /42	1 /50	0 /55	0 /34	1 /12	0 /5	0 /13	
10 (63 pts)	6 /51	1 /61	2 /59	0 /62	2 /59	0 /51	0 /38	1 /57	0 /33	0 /24	3 /36	0 /38	0 /23	0 /6	0 /9	0 /6	0 /2

(Table S1) contd.....

11 (34 pts)	4/28	0/34	0/31	0/34	1/33	1/27	0/23	1/29	0/13	0/18	1/28	0/32	0/13	0/8	0/5	0/8	0/2
12 (38 pts)	1/34	1/36	1/34	0/38	1/37	0/31	0/21	2/36	0/18	0/31	0/38	0/36	0/14	0/13	0/14	0/16	0/3
13 (41 pts)	0/40	0/41	0/41	1/40	1/40	0/37	0/33	1/38	0/29	1/38	0/38	0/35	0/15	0/20	0/24	0/19	0/1
14 (45 pts)	2/43	2/43	0/44	0/45	2/43	0/43	0/37	0/44	0/38	0/42	1/44	0/44	0/23	0/38	0/34	0/18	
15 (34 pts)	2/32	0/34	1/33	0/34	2/32	0/33	0/27	0/34	0/28	0/34	1/33	0/34	0/28	0/31	0/31	0/22	0/4
16 (17 pts)	4/13	0/17	0/17	0/17	0/17	0/17	0/17	0/17	0/17	1/16	0/17	0/17	0/17	0/17	0/17	0/17	

PCRs:real-time polymerase chain reaction pt: patient; pts: patients

EV: enterovirus; PVB19: parvovirus B19; EBV: Epstein-Barr virus; VZV: varicella zoster virus; HHV-7: human herpes virus-7; HSV: herpes simplex virus; JC: JC virus; HHV- 6: human herpes virus-6; MEAV: measles virus; HAdV: human adenovirus; CMV: cytomegalovirus; WNV: West Nile Virus; HPeVs: human parechoviruses; TBEV: tick-borne encephalitis virus; HHV-8: human herpes virus-8; MUMV: mumps virus; HTLV-1: human T-cell leukemia virus type 1. HHV-8: human herpes virus-8. ^aHPeVs tested from May 2012; ^bHAdV tested from February 2012; ^cHHV-7 tested from January 2013.

Supplementary Table 2. Description of number of PCRs made and of positive PCRs of the virus which had a positive result in the 353 patients who had HHV-7 tested on CSF and in the 1109 who had not. The PCRs were described both as absolute value and as percentage respect to the number of tests performed for the specific virus. The viruses are listed according to the percentage of positive PCRs found in the overall population. Only viruses which had a positive result in the overall study population were included in the table.

Viral PCRs	Tested in patients with HHV-7 ^a		p
	DNA tested (353patients), n (%)	DNA not tested(1109 patients), n (%)	
EV	283 (80.2)	722 (65.1)	< 0.0001
EBV	324 (91.8)	714 (64.4)	< 0.0001
HSV	344 (97.5)	1087 (98)	0.5206
VZV	319 (90.4)	902 (81.3)	0.0001
HHV-6	334 (94.6)	143 (12.9)	< 0.0001
CMV	337 (95.5)	741 (66.8)	< 0.0001
JC	121 (34.3)	162 (14.6)	< 0.0001
HAdV ^b	223 (63.2)	154 (13.9)	< 0.0001
HPeVs ^c	260 (73.7)	559 (50.4)	< 0.0001
WNV	191 (54.1)	351 (31.7)	< 0.0001
MEAV	137 (38.8)	22 (2)	< 0.0001
PvB19	12 (3.4)	16 (1,4)	0.0195
Positive Viral PCRs	Patients with HHV-7 ^a	Patients with HHV-7 ^a	p
	DNA tested, n (%)	DNA not tested, n (%)	
EV	19 (6.7)	33 (4.6)	0.1679
EBV	11 (3.4)	25 (3.5)	0.9309
HSV	6 (1.7)	29 (2.7)	0.3339
VZV	4 (1.2)	31 (3.4)	0.049919
HHV-6	5 (1.5)	3 (2.1)	0.701372
CMV	1 (0.3)	4 (0.5)	1
JC	0	5 (3.1)	0.073460
HAdV ^b	2 (0.9)	0	0.515
HPeVs ^c	0	1 (0.2)	1
WNV	0	1 (0.3)	1

(Table S2) contd.....

MEAV	0	1 (4.5)	0.138365
PvB19	0	1 (6.2)	1

PCRs: real-time polymerase chain reaction pt: patient; pts: patients

EV: enterovirus; PvB19: parvovirus B19; EBV: Epstein-Barr virus; VZV: varicella zoster virus; HHV-7: human herpes virus-7; HSV: herpes simplex virus; JCV: JC virus; HHV-6: human herpes virus-6; MEAV: measles virus; HAdV: human adenovirus; CMV: cytomegalovirus; WNV: West Nile Virus; HPeVs: human parechoviruses.

^aHHV-7 tested from January 2013; ^bHAdV tested from February 2012; ^cHPeVs tested from May 2012.

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