

1 (1) 3 6
MRI (2)
1 7 3 6
(T3) (FF) (T4) (TSH)

	%		%		²	P
NF	51	47.922	41	36.878	0.199	0.730
PRL	23	23.1000	28	26.929	1.710	0.495
GH	14	14.1000	11	9.818	2.767	0.183
ACTH	2	2.1000	3	2.667	0.833	1.000
	90	86.956	83	73.880	3.357	0.067

-1(IGF-1)
PRL
GH GH 1 ng/ml IGF-1⁹
1.2.2

	%		%		²	P
PRL	23	21.913	28	21.750	1.324	0.250
GH	14	12.857	11	7.636	1.646	0.350
ACTH	2	2.1000	3	2.667	0.833	1.000
	39	35.897	42	30.714	4.279	0.039

1.3 SPSS 21.0
² P 0.05
2
2.1 1
90
83 NF
GH
(P 0.05)

2.4 77
90 43
(47.8%) 83
34 (41.0%) (χ²=0.812)
P=0.368
2.5 2()

	1	(%)
NF	92	51(55.4)
PRL	51	23(45.1)
ACTH	5	2(40.0)
GH	25	14(56.0)
	173	90(52.0)

3
1936 Costello²
" "
(Pseudocapsule)
2006 Oldfield Vortmeyer¹

² 1.857 P=0.003
2.2
1() 2 86
(95.6%) 17
100%
73 (88.0%)

2 mm
2~3 mm
5.6 10 14

2.3 3
81 65
(P 0.05)

Lee¹⁰ 55.7%
52.0%
Lee
(1) (2) (3)
(4) (5)

10 Kim 14

5

Kawamata 5 Chamoun 15

Xie 16

Lee 10

GH

PRL

NF
55.4%

GH
56.0%

PRL

45.1%

PRL

Teramoto 17

Kim 14 1 000

(P=0.004)

17

100%

5 16 18 ACTH
10 11

6 7

GH

10

19

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CTP - CTA

CT (CIP) CT (CTA)
 50 50 48 CTP
 96%
 (CBF) (CBV) (MIT) (TTP) 50
 42 3D-CTA CTP-CTA
 CTP CTA

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Diagnosis value of one stop whole brain dynamic volume CTP-CTA imaging in cerebral vasospasm after traumatic brain injury YU Hui-ping ZHANG He-ping LI Jin-miao Department of Neurosurgery Affiliated Quanzhou First Hospital Fujian Medical University Quanzhou 362000 China

Abstract Objective To explore the application and clinical significance of one stop whole brain dynamic volume CTP-CTA imaging in cerebral vasospasm after traumatic brain injury. **Methods** Totals of 50 patients with suspected symptomatic cerebral vasospasm were treated with one stop whole brain dynamic volume imaging. The results of CTP were compared with that of the contralateral mirror area. **Results** In 50 patients, 48 showed low perfusion areas outside the scope of brain injury which was consistent with clinical symptoms. The accuracy rate was 96%. There were significant differences in cerebral blood flow (CBF), cerebral blood volume (CBV), time-to-peak (TTP) and mean transit time (MIT) compared to the contralateral mirror area. In 50 traumatic brain injury patients, 42 showed intracranial vasospasm of great vessels in 3D-CTA. **Conclusions** One-stop whole brain dynamic volume CTP-CTA imaging could be applied in evaluating cerebral vasospasm after traumatic brain injury. Microcirculation vasospasm in brain parenchyma could be detected by low perfusion cerebral area in CTP. Vasospasm of great vessels outside brain parenchyma could be detected by CTA. Therefore, CTP combined with CTA has significant clinical value in early diagnosis, selection of treatment options and evaluation of efficacy for cerebral vasospasm after traumatic brain injury.

Keywords Craniocerebral trauma Cerebral vasospasm Perfusion Vascular imaging

1-2

362000

(Cerebrovascular Spasm CVS)

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