

Correlation among Different Severity of Migraine and Traditional Chinese Medicine Diagnosis

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Objective

To compare the Traditional Chinese Medicine (TCM) diagnoses among different severity of migraine

Background

TCM regards disease as disharmony in human body on Qi (life energy), blood (nutrition), and water (fluid). The studies of the comparisons between western and TCM diagnoses of migraine are still lacking.

Methods

1. We recruited migraine patients from a headache clinic from May to September 2012.
2. Migraine was diagnosed according to the ICHD-2 criteria.
3. Migraine Disability Assessment (MIDAS) score was used to classify patients into five groups: group I (0-5), II (6-10), III (11-20), IVA (20-40), and IVB (>40).
4. Patients who had other superimposed secondary headaches were excluded.
5. Meridian questionnaire and "Terasawa Qi deficiency and blood stasis syndrome scale" were used for TCM diagnosis.

Results

<Table 1> Totally 109 patients were enrolled. 62 patients had Qi deficiency, 15 patients had blood stasis syndrome, and 11 patients had both.

<Table 2> "Shaoyang" was the most common overall affected meridian (43.1%).

<Table 3>

a) The frequency of "Qi deficiency" was correlated well with the MIDAS score ($p=0.008$).

b) The frequency of "Blood stasis" was the highest in group IVB but without statistical significance.

<Table 4>

a) "Qi deficiency" score was the highest in Group IVB (37.8 ± 18.4 , $p=0.002$, ANOVA test, Pearson correlation coefficient = 0.382).

b) The "Blood stasis" scores were similar among groups.

Conclusions

- From the viewpoint of TCM diagnosis, Shaoyang headache is the most common in migraine patients.
- "Qi deficiency" occurred more frequently in migraine patients with higher disability.
- It is not certain whether "Blood stasis" correlates with migraine severity. A large-scaled study is needed to solve this issue.

<Table 1> Demographics and Headache Characteristics among Different MIDAS Groups

	I, n=11	II, n=13	III, n=26	IVA, n=29	IVB, n=30
Female (n, %)	10 (90.0)	12 (92.3)	24 (92.3)	27 (93.1)	24 (80.0)
Age (years)	41.3±11.1	42.6±8.1	39.7±13.2	36.6±11.8*	48.6±15.2*
Education (years)	11.6±4.3	11.3±3.4	12.2±4.0	11.9±3.1	9.7±3.9
Body mass index	28.1±5.2	27.1±3.1	28.3±4.0	26.9±5.1	29.8±3.7
Onset age (years)	25.5±10.5	28.2±9.0	25.0±11.1	22.0±10.3	27.2±10.1
Disease duration (years)	15.8±9.2	14.4±9.1	15.4±7.6	14.1±9.2*	22.0±13.6*

* There are significant differences about age ($p=0.001$) and disease duration ($p=0.032$) between IVA and IVB group (by ANOVA following post Hoc Bonferroni test).

<Table 2> Distribution of Meridian Diagnoses among MIDAS Subgroups

Meridians	Shaoyang	Yangming	Taiyang	Jueyin
I	36.4%	9.1%	45.5%	9.1%
II	38.5%	0%	23.1%	38.5%
III	46.2%	7.7%	23.1%	23.1%
IVA	48.3%	6.9%	20.7%	24.1%
IVB	40.0%	3.3%	16.7%	40.0%
Overall	43.1%	5.5%	22.9%	28.4%

† Shaoyang: TW-GH meridians, Yangming: LI-ST meridians, Taiyang: SI-BL meridians, Jueyin: PC-LR meridians

‡ "Shaoyang" was the most common affected meridian, while "Taiyang" was the most common in Grade I group.

<Table 3> Prevalence of Qi Deficiency and Blood Stasis Syndrome among MIDAS Subgroups

	I	II	III	IVA	IVB
Qi Deficiency	18.2%	5.3%	50.0%	55.2%	80.0%
Blood Stasis	0%	0%	3.8%	20.7%	26.7%

The frequency of "Qi deficiency" was correlated well with the MIDAS score ($p=0.008$, χ^2 test), while the "Blood stasis" also show this tendency but without statistical significance ($p=0.072$, χ^2 test).

<Table 4> Qi Deficiency and Blood Stasis Score among MIDAS Subgroups

	I	II	III	IVA	IVB
Qi Deficiency	20.1±12.9	23.5±11.1	26.5±12.7	31.6±12.9	37.8±18.4*
Blood Stasis	6.4±5.0	4.0±5.0	7.6±9.1	11.1±9.5	13.3±18.8

* "Qi deficiency" score was the highest in Group IVB ($p=0.002$, ANOVA test), while the "blood stasis" score were similar among MIDAS subgroups ($p=0.122$, ANOVA test).

