



The Correlations between Meridian Energy and Nausea/Vomiting in Lung Cancer Patients Receiving Chemotherapy

Chi-Hsiang Shen¹, WuLi-Yu Yang²

Department of Nursing, Kaohsiung Medical University Hospital, Kaohsiung Medical University¹

College of Nursing, Kaohsiung Medical University²

Introduction

➤Chemotherapy-induced nausea and vomiting are among the most common side effects of chemotherapy treatment. However, according to the Chinese medicine theory, chemotherapy would not only kill cancer cells but also cause impairment of healthy Qi and disharmony of the viscera and bowels, thereby resulting in stomach Qi failing to bear downward and spleen-stomach weakness. Meridians are the channels through which Qi and blood circulate and could reflect the abnormalities or disorders of internal organs.

Methods

➤A cross-sectional and correlational design was used. The participants were a total of 70 lung cancer patients who had received at least one dose of Cisplatin (50-75mg/m2) and had experienced nausea/vomiting during chemotherapy from the chest medicine ward of a medical center located in Southern Taiwan.

➤The research instruments, including a demographic data sheet, the Morrow Assessment of Nausea and Emesis, and the Meridian Energy Analysis Device, were used to collect and monitor participants’ level of nausea/vomiting and changes in meridian energy.

Conclusions

➤The results of this study found that, despite being within the normal range, the Pericardium Meridian of Hand-Jueyin, Spleen Meridian of Foot-Taiyin, and Mean Meridian Energy values in patients receiving chemotherapy were only slightly higher than the lower limit of normal range and were far lower than the median value of meridian energy. The low energy indicated that the Qi and blood status of lung cancer patients who received chemotherapy was weaker than that of healthy people.

➤This study did not find direct correlations between the level of nausea/vomiting and the Pericardium Meridian of Hand-Jueyin, Spleen Meridian of Foot-Taiyin, and Mean Meridian Energy. The reason might be that these lung cancer patients have not yet experienced nausea/vomiting while having a low Mean Meridian Energy, so the correlations between nausea/vomiting and meridian energy could not be established.

➤This study could not directly infer whether chemotherapy-induced nausea/vomiting would affect the changes in the Pericardium Meridian of Hand-Jueyin, Spleen Meridian of Foot-Taiyin, and Mean Meridian Energy.

Purpose

➤The purpose of this presentation is to explore the correlations between meridian energy and nausea/vomiting in lung cancer patients receiving chemotherapy.

Findings

➤The Pericardium Meridian of Hand-Jueyin, Spleen Meridian of Foot-Taiyin, and Mean Meridian Energy values in lung cancer patients receiving chemotherapy ranged from 21.1 to 27.5 microamperes, which were relatively low as compared with the normal meridian energy values (20-60 microamperes).

➤However, no correlations were found between the level of nausea/vomiting and all meridian energy variables.

➤Demographic characteristics (Table 1). Correlations between demographic characteristics and meridian energy, nausea/vomiting (Table 2).

Table 1. Demographic characteristics (N = 70)

Variables	n	%
Age (years)		
< 35	3	4.3
36-55	18	25.7
56-75	49	70.0
Gender		
Male	43	61.4
Female	27	38.6
Education		
Below elementary	19	27.1
Junior high	30	42.9
Above senior high	21	30.0
Marital status		
Unmarried	8	11.4
Married	62	88.6
Past history		
None	34	48.6
1	14	20.0
≥ 2	22	31.4
History of car-sickness or sea-sickness		
No	54	77.1
Yes	16	22.9
History of alcohol		
No	39	55.7
Yes	31	44.3
Intended chemotherapy regimen		
Second to third	36	51.4
Fourth to Fifth	16	22.9
Sixth or more	18	25.7
Additional antiemetics		
No	67	95.7
Yes	3	4.3

Table 2. Correlations between demographic characteristics and meridian energy, nausea/vomiting (N = 70)

Variables	Pericardium Meridian of Hand-Jueyin on left side	Pericardium Meridian of Hand-Jueyin on right side	Spleen Meridian of Foot-Taiyin on left side	Spleen Meridian of Foot-Taiyin on right side	Mean Meridian Energy	Nausea severity	Vomiting severity
Age	-0.002	-0.034	-0.07	-0.038	.000	0.04	-0.177
Gender	.253*	.310**	0.216	.243*	0.185	0.033	-0.088
Education	0.158	.264*	0.226	.275*	0.15	-0.065	-0.207
Marital status	0.188	0.116	0.176	0.159	0.118	-0.06	0.019
Past history	-.277*	-.271*	-.380**	-.295*	-.297*	0.051	0.056
Experience of car-sickness or sea-sickness	0.167	0.09	0.126	0.158	0.179	-.251*	-0.065
Experience of alcohol	0.128	0.145	-0.003	0.058	0.029	0.062	-0.103
Intended chemotherapy regimen	-0.187	-.248*	-0.129	-0.097	-0.169	0.076	.251*
Additional antiemetics	-0.069	-0.14	-0.124	-0.136	-0.129	-.272*	-0.219

Notes: *P< .05 ; **P< .01

