

The Role of Matrix Metalloproteinases 8 Genotypes in Gastric Cancer Risk in Taiwan

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Abstract

In post-genomic era, it is hypothesized that abnormal expression of matrix metalloproteinase 8 (MMP8), an collagenase in charge of regulating the extracellular matrix, may play a critical role in the development of gastric cancer, which is one of the global leading causes of death. Since the importance's of MMP8 genotype/phenotype has never been studied in literature about gastric cancer in Taiwan and all over the world, our aim is to investigate MMP8 promoter (C-799T) and exonic (Lys460Thr and Val436Ala) genotypes and gastric cancer susceptibility in a central Taiwan population based on China Medical University and Hospital. In the current study, the association of MMP8 C-799T, Lys460Thr and Val436Ala genotypes with gastric cancer risk was examined and evaluated among 121 gastric cancer cases and 363 gender- and age-matched non-cancer subjects via the typical genotyping methodology, polymerase chain reaction-based restriction fragment length polymorphism (PCR-RFLP). In the results, we have noticed a slight but not-significant difference in the distribution of T allelic frequencies of the MMP8 C-799T genotype (odds ratio [OR]=0.86, 95% confidence interval [CI]=0.62-1.19, P=0.3669), but not in those exonic polymorphic sites, between the gastric cancer case and control groups. Those who had CT or TT variant genotypes at MMP8 C-799T showed a 0.89-and 0.73-fold (95%CI=0.57-1.38 and 0.35-1.56, P=0.6027 and 0.4189, P for trend =0.6813) risk of gastric cancer compared to those with CC. The risk CT and TT genotypes at MMP8 C-799T, Lys460Thr or Val436Ala have no synergistic effect with alcohol drinking, cigarette smoking nor Helicobacter pylori infection status on gastric cancer risk determination. Overall, the pilot study suggested that the three polymorphic sites of MMP8 may contribute to gastric carcinogenesis non-significantly and may not be a practical biomarker for gastric cancer early detection and prevention, at least in Taiwan population.

Keywords: drinking; gastric cancer; genotype; MMP8; polymorphism; smoking; Taiwan

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Resident Medical Service of Chinese Medicine in College Can Effectively Increase the Utilization Rate of Chinese Medical Services

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Abstract

Background: In Taiwan, a considerable proportion of people use both Chinese medicine and Western medicine. According to the survey, up to 80% of people are satisfied with the quality of Chinese medical services. However, the utilization rate of Chinese medical services has been decreasing year by year. So this study aims to investigate whether resident medical service of Chinese medicine in college can effectively increase the utilization rate of Chinese medical services.

Methods: The population of this study is based on the staff as well as students of a university in Southern Taiwan who accepted resident medical service of Chinese medicine in 2017. Questionnaires were delivered to 57 subjects, and a total of 45 valid questionnaires were collected for analysis. The effective questionnaire recovery rate is 78.95%.

Results: By the analysis of the data, female patients are more than male patients and the overall average age is 28.19. And the number of times of using the service is 1 time mainly. Most of the subjects have high satisfaction with Chinese medicine experience. The most common diseases that subjects had been managed are musculoskeletal disorders, acute gastrointestinal tract disorder along with common cold. After treatment, most of the subjects are relieved substantially; furthermore, only very few appear uncomfortable symptoms. Regarding the satisfaction of the quality of this medical service, most of the subjects give high satisfaction. Merely very few subjects are not satisfied with the treatment effect and medical equipment. Finally, only 4% of the respondents are reluctant to recommend this experience of resident medical service to other relatives and friends.

Conclusion: Resident medical service of Chinese medicine in college gets high acceptance and high satisfaction; moreover, up to 90% of the subjects are willing to recommend Chinese medicine to relatives and friends through this good experience. It indicates that resident medical service of Chinese medicine in college can effectively increase the utilization rate of Chinese medical services.

Keywords: utilization rate of Chinese medical services, Chinese medicine, resident medical service in college, Satisfaction

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Integration of Chinese and Western Medicine in Treating Ischemic Stroke in Posterior Cerebral Artery : A Case Report

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Abstract

Treating a stroke must take advantage of the first 6 months after the cerebrovascular accident, especially the period with best recovery within 3 months. This is a case of a 55 years old male with right ischemic stroke in posterior cerebral artery, attending the post-acute care (PAC) program following acute stage therapy. This case report described the established efficacy of rehabilitation in Chinese medicine and acupuncture, occupational therapy and physical therapy during the PAC program. We considered that Chinese medicine and acupuncture therapy as an adjuvant and alternative therapy to western medicine in treating stroke could make significant progress in treating motor and sensory impairments and in improving quality of daily life. This case report provided a successful example of the integration of Chinese and western medicine in treating ischemic stroke in posterior cerebral artery.

Keywords: Posterior Cerebral Artery, Ischemic Stroke, Traditional Chinese Medicine, Occupational Therapy, Physical Therapy.

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Traditional Chinese medicine in a patient with chemotherapy-induced peripheral neuropathy: a case report.

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Abstract

A 51-year-old Taiwanese woman with history of stage III colon cancer. She has suffered from numbness and tingling in the limbs, which was caused by Oxaliplatin-based regimens since 2016. Western medications have been tried to treat her symptoms associated with chemotherapy-induced peripheral neuropathy (CIPN), few are consistently effective or tolerable. Therefore, she went to our traditional Chinese medicine (TCM) clinic for discomfort management in May 2019. Deficiency of qi-blood and cold inducing stagnation of meridian was identified by TCM syndrome differentiation. Her symptoms of neuropathy improved after 1-monthly intervention of Huang Qi Gui Zhi Wu Wu Tang and Dang Gui Si Ni Tang. The quality of life was also improved after TCM treatment through objective questionnaire assessments. In this case, we report this clinical experience and evidence-based treatment for CIPN. We also explore TCM viewpoint for CIPN. The essential therapeutic principle of this nerve damage is to strengthen the spleen and stomach and distinguish the nature of the disease. We highlight the benefit of alternative TCM treatment to achieve a better health care for the patients with CIPN.

Keywords: Traditional Chinese medicine; cancer; chemotherapy-induced adverse event; peripheral neuropathy

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