



Use of acupuncture therapy as a supplement to conventional medical treatments for acute ischaemic stroke patients in an academic medical centre in Korea

Hyejung Chang^a, Young Dae Kwon^b, Sung Sang Yoon^{c,*}

^a Department of Health Services Management, School of Management, Kyung Hee University, Seoul, Republic of Korea

^b Department of Humanities and Social Medicine, College of Medicine, the Catholic University of Korea, Seoul, Republic of Korea

^c Department of Neurology, College of Medicine, Kyung Hee University, Dongdaemoon-Gu Hoegi-Dong 1, Seoul, Republic of Korea

Available online 6 September 2011

KEYWORDS

Stroke;
Cerebral infarction;
Acupuncture therapy

Summary

Objectives: Acupuncture has served as a major complementary and alternative therapy that supplements conventional medicine and is the subject of growing public interest. This study was conducted to estimate the usage rate of acupuncture as a supplemental treatment in acute ischaemic stroke patients and to identify factors associated with the choice to use this therapy. **Methods:** Using the registry of stroke patients admitted to an academic medical centre in Korea, the use of acupuncture therapy was recorded and analysed, along with the patients' socio-demographic characteristics, hospital access variables, risk factors for ischaemic stroke and clinical characteristics. The data were analysed using descriptive statistics, chi-square tests and multiple logistic regression analyses.

Results: Of 2167 patients, 18% received acupuncture therapy. The choice of acupuncture therapy was significantly associated with stroke severity as well as gender, age, geographical residence and previous history of stroke. After controlling for other significant factors, there was an approximately 3.4-fold greater usage in patients with moderately severe strokes (95% confidence interval (CI) = 2.5–4.6) and 4.1-fold greater usage in patients with severe strokes (95% CI = 2.7–6.4).

Conclusions: The findings provide a better understanding of patients' utilization of acupuncture therapy as a supplement to conventional medical treatments and of factors associated with the utilization of acupuncture in patients with acute ischemic stroke. Strategic implications of acupuncture therapy are suggested for both health-care providers and policy makers.

© 2011 Elsevier Ltd. All rights reserved.

Increasing attention has been paid to complementary and alternative medicine (CAM). Even in the United States, 74.6% of individuals of 18 years and older have used some form of CAM therapies, while 14.8% have sought care from a licensed or certified CAM practitioner.¹ From the provider

* Corresponding author. Tel.: +82 2 958 9763; fax: +82 2 958 8490.
E-mail address: hsyoon96@khu.ac.kr (S.S. Yoon).

perspective, a 2008 survey of US hospitals by Health Forum, a subsidiary of the American Hospital Association, found that more than 37% of responding hospitals indicated that they offer one or more alternative medicine therapies, such as acupuncture, homeopathy and massage therapy, compared with 26.5% in 2005.²

Acupuncture in particular has been a major part of health-care services in CAM. In the 2002 National Health Interview Survey sample, 4.1% of the respondents reported lifetime use of acupuncture and 1.1% (representing 2.13 million Americans) reported recent use.³ Acupuncture is used extensively for various medical purposes in the prevention and treatment of disease; it is best known for the control of pain, but it can treat a wide variety of common and uncommon disorders. The World Health Organization (WHO) has stated that many disorders of the eye and mouth as well as of the respiratory, gastrointestinal, nervous and musculoskeletal systems can be treated by acupuncture.⁴

Traditional Korean medicine has developed unique medical theories and methods to treat diseases including neurological disorders such as stroke, epilepsy and Parkinson's disease.⁵ Although ancient Korean and Chinese medicine held close relationships, Korea has continued to develop unique medicine of its own over the years and established types of acupuncture methods different from those of traditional Chinese medicine.⁶ The main components of traditional Korean medicine consist of medicinal treatment, acupuncture and Sasang constitutional medicine. Traditional Korean medicine has provided benefits of the best quality by the herbal medicines such as Korean ginseng, the unique individualised acupuncture theories and the academic background in constitutional theories.⁵

In Korea, there are 14,818 Oriental medicine physicians, 11,334 Oriental health clinics, and 146 Oriental health hospitals to diagnose and treat patients with traditional Korean medicine.⁷ Acupuncture therapy has been widely used by Oriental medicine physicians⁸ and in 2008, the Korean national health insurance (NHI) spent 551.4 million USD (1USD = 1102.6 Korean Won) on acupuncture, which represents 1.74% of the total NHI medical expenses for that year (NHIC and HIRA, 2009).⁷

Stroke is an important disease because of its frequent and severe complications and sequelae, such as paralysis, speech and swallowing problems and depression. 'Paralysis following stroke' is explicitly specified in WHO's list of neurological and musculoskeletal disorders.⁴ Many studies have been published that demonstrate a significant benefit of acupuncture therapy in stroke patients.^{9–13} These studies indicate that patients receiving acupuncture recover more quickly, perform better in self-care, require less nursing and rehabilitation therapy and have lower health-care expenses, compared with patients not receiving acupuncture. In spite of the popularity of acupuncture for treating a range of neurological disorders, the evidence that supports its use is contradictory.¹⁴

Acupuncture therapy is commonly used for stroke patients in Oriental countries.⁴ Specifically, Oriental medicine (consisting of acupuncture, herbal medicine, etc.) is considered to be one of the options available for the treatment and rehabilitation of stroke patients in Korea.¹⁵

There has been a great deal of research in the field of fusion medicine, which integrates traditional and modern medicine. Some hospitals and clinics provide Oriental medicine, which employs a spiritual and functional theory that observes life through holistic concepts of disease, in addition to Western medicine, which employs a systematic and objective theory with well-developed medical technology for specific diseases. This approach is consistent with a previous study that demonstrated the beneficial effects of acupuncture treatment combined with standard in-patient stroke rehabilitation on post-stroke motor recovery and physical function.¹⁶ Although no significant differences in overall measures between treatment groups were found, a statistically significant benefit attributed to acupuncture was observed for the lower-extremity motor function subscale and the tub/shower transfer mobility subscale.

Therefore, this study aimed to estimate the usage rate of acupuncture as a supplement to conventional medical treatment in ischaemic stroke patients and to identify the factors associated with the use of the therapy.

Materials and methods

Subjects and setting

The subjects in our study were ischaemic stroke patients who had been admitted to the neurology wards of an acute care hospital in an academic medical centre in Seoul, Korea. The centre is a general medical institution equipped with both Western and Oriental medicine hospitals. Therefore, the setting of the centre provided an ideal environment to determine factors affecting access to Oriental medicine as a supplement to conventional Western medicine. In general, along with Western medical therapies, patients can voluntarily receive traditional Korean medicine services, such as acupuncture therapy, upon their request followed by physicians' permission.

Only in-patients admitted within 7 days after the onset of symptoms were considered. The patients were diagnosed based on their history, neurological tests, computed tomography, magnetic resonance imaging, magnetic resonance angiography and other neuroradiological results. Along with conventional medical treatment, Oriental medicine physicians visit stroke patients in neurology wards and provide acupuncture therapy 2 or 3 times per week, if they wish. Ambulatory stroke patients can visit the acupuncture therapy room and get the treatment there. There are seven acupuncture points: GV20, GB7, GB21, GB31, ST36, GB39 and LI11.

In total, 2167 patients admitted from September 2003 to March 2009 were included in the analysis. This sample size was considered sufficiently powerful to detect differences in proportions of acupuncture use among up to five groups of equal sizes. Assuming a type I error (α) of 0.05 in two-tailed chi-square tests, the sample of 2167 subjects produced 84% chance of detecting a 10% difference in the probability of using acupuncture therapy. The study was approved by the institutional review board of the centre.

Download English Version:

<https://daneshyari.com/en/article/2628978>

Download Persian Version:

<https://daneshyari.com/article/2628978>

[Daneshyari.com](https://daneshyari.com)