Observation of Complete Blood Count and Biochemical Parameter after Indirect Moxibustion (CV4, CV8) in Healthy Adults

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Abstract

목적: 본 연구는 간접구의 안전성에 대한 기초 데이터를 확보하기 위하여 수행되었다.

연구설계: 50명의 건강한 성인을 무작위 배정으로 두 그룹으로 나누어 4주간 (일주일에 3회) 신선한과 관원형에 틀을 시술하였다. 시험군에 비하여 대조군은 열이 전달되지 않도록 단열제로 처리한 틀으로 동일한 부위에 시술하였다. 첫 시술 1시간 전과 마지막 시술 1시간 후에 공복상태에서 채혈을 하여 혈액학적 검사를 시행하였다.

결과: 혈액학적 검사에서 적혈구와 총 백혈구 및 백혈구의 종류별 절대수치와 상대수치에서 두 그룹간에 특별한 차이가 없었다. 또한 혈청학적 검사에서 총 단백질, 알부민, AST, ALT, ALP, GGT, LDH, 요소질소, 크레아티닌, 총콜레스테롤 및 중성지방의 비교에서도 그룹간에 차이가 없었다.

결론: 본 연구는 건강한 사람에서 간접구의 시행 후 혈액학적 안전성을 처음으로 보고하는 것으로서, 향후 등의 연구를 수행시 중요한 비교 자료로 사용될 수 있을 것이다.

Key words: Moxibustion, Clinical study, CV4, CV8, Korean traditional medicine

Introduction

Moxibustion therapy is to burn the fluff of mugwort on specific point on a patient’s skin as purpose of treatment or prevention of diseases, and this therapy plays an important role in the traditional Korean medicine. Moxibustion is regarded as a prospective treatment for chronic disease condition accompanying with weak or cold symptom. Recently, moxibustion therapy is attracting great attention worldwide.

Korean Health Industry Development Institute reported that moxibustion is third popular Oriental therapy in 2007. Korean national health insurance paid over 27 billion won for health service with moxibustion treatment in 2008. 67% of Oriental doctors use moxibustion for their medical practice, and Oriental doctors pointed out the therapeutic efficacy and positive response from patients as the biggest advantage of moxibustion treatment. These facts indicate the importance of research and development of moxibustion.
traditional moxibustion therapy.

The moxibustion therapy-associated researches have been done so far. However, they are still very deficient relatively to researches for acupuncture which is another main Oriental therapy. In particular, moxibustion therapy is sometimes regarded as a folk remedy due to the popular use of it by both Oriental doctor and non-licensed practitioner without precise proofs. The current medical importance of evidence-based medicine strongly demand scientific data derived from clinical research.

This study aimed to provide a basic data regarding to safety of indirect moxibustion using human blood cell count and biochemical parameters. This result would be a valuable reference in further clinical study for moxibustion application.

Subjects and methods

1. Subjects and randomization

Healthy adults without night work, alcohol drink, smoke, any medicine use, and over weigh were recruited. Subjects with abnormality in hematological and radiological test were excluded. Finally, 50 subjects (15 men and 35 women) were included (median age 46.5 years, range 20-65 years). Subjects were allocated into either the control group (10 men and 15 women, median age, 42 years) or the experimental group (5 men and 20 women, median age 47 years) by block randomization. Informed consent was obtained from each subject, and the ethical committee of Daejeon University Hospital approved the study protocol.

2. Study design and indirect moxibustion treatment

A licensed doctor performed the indirect moxibustion at two acupoints (CV4 and CV8) 3 times (every other day) per week for 4 weeks. One moxa corn (3.5 g of wormwood fiber, KyeGoo Inc., Incheon, Korea) for each point (CV4 and CV8) was burnt for 30 min per performance. For the control group, moxa having a heat insulator was used (Fig 1). The infrared lamp was applied to both groups as minimal level for keeping abdomen warmth.

Fig. 1. Feature of moxa corn (A) and locations for treatment of indirect moxibustion (B)