

Evaluation of cupping therapy as an adjuvant therapy in management of bronchial asthma

THESIS

Submitted for Partial Fulfillment of
Master Degree in Chest Diseases

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2008

INTRODUCTION

Asthma is a serious global health problem. People of all ages in countries throughout the world are affected by this chronic airway disorder that, when uncontrolled, can place severe limits on daily life and is sometimes fatal. (1)

Asthma is a problem worldwide, with an estimated 300 million affected individuals. Although from the perspective of both the patient and society the cost to control asthma seems high, the cost of not treating asthma correctly is even higher. (2)

The prevalence of asthma is increasing in most countries, especially among children. Asthma is a significant burden, not only in terms of health care costs but also of lost productivity and reduced participation in family life. (1)

In spite of laudable efforts to improve asthma care over the past decade, a majority of patients have not benefited from advances in asthma treatment and many lack even the rudiments of care. (3)

Various treatments are available – for asthma – but patients often fail to benefit from them and have been reported to be unsatisfied at the regular use of pharmacological drug therapy including the use of steroids whether inhaled or systemic. (4)

Alternative medicine has been defined as "therapeutic or preventive health care practices, such as homeopathy, naturopathy, chiropractic, and herbal medicine that do not follow generally accepted medical methods and may not have a scientific explanation for their effectiveness." (5)

Although the term 'alternative' is commonly used in the literature for developing countries, the role of these modalities are primarily 'complementary' in the European Union (EU) and the United States, i.e., patients use them to complement the treatments offered by their conventional health care providers.(6)

A major objection to alternative medicine is that it is done in place of conventional medical treatments. As long as alternative treatments are used

alongside conventional treatments, the majority of medical doctors find most forms of complementary medicine acceptable. Consistent with previous studies, the CDC

recently reported that the majority of individuals in the United States (i.e., 54.9%) used complementary and alternative medicine (CAM) in conjunction with conventional medicine. (7)

Increasing numbers of medical colleges have started offering courses in alternative medicine. For example, the University of Arizona College of Medicine offers a program in Integrative Medicine which trains physicians in various branches of alternative medicine which : " ...neither rejects conventional medicine, nor embraces alternative practices uncritically."(8) In three separate research surveys that surveyed 729 schools in the United States (125 medical schools offering an MD degree, 25 medical schools offering a Doctor of Osteopathy degree, and 585 schools offering a nursing degree), 60% of the standard medical schools, 95% of osteopathic medical schools and 84.8% of the nursing schools teach some form of CAM.(9)(10)(11)

A survey released in May 2004 by the National Center for Complementary and Alternative Medicine, part of the National Institutes of Health in the United States, found that in 2002, 36% of Americans used some form of alternative therapy in the past 12 months, 50% in a lifetime — a category that included yoga, meditation, herbal treatments and the Atkins diet.(12) If prayer was counted as an alternative therapy, the figure rose to 62.1%. 25% of people who use CAM do so because a medical professional suggested it. Another study suggests a similar figure of 40%.(13)

The use of CAM in asthma patients is increasing as an adjunct and also as a substitute for effective and proven therapies (14) .

The use of (CAM) is very popular. According to Blanc et al., (15) Ernst et al., (16) Schafer et al., (17) and Ng TP et al., (18) 59% of patients with asthma or rhinosinusitis in the United Kingdom, 41% in the United States, 26.5% in Germany, and 27.2% in Singapore are reported to use CAM. The only exception is the study of Partridge et al., (19) reporting only 6% of asthma patient in the United Kingdom using CAM .

Many studies evaluating the use of complementary and alternative medicine (CAM) by children with chronic illnesses, such as cystic fibrosis, juvenile arthritis, cancer, and asthma, found a user rate as high as 72%. **(20, 21, 22)**

Traditionally, Cupping Therapy has been practiced in most cultures in one form or another. In the UK the practice of Cupping Therapy also dates back a long way with one of the leading medical journals 'The Lancet' being named after this practice. A lancet is a piece of surgical equipment that was traditionally utilized to release excess blood i.e. venesection and to prick boils. The practice of Cupping has been part of Middle-Eastern cultural practice for thousands of years with citations dating back to the time of Hippocrates (400 BC). Of the western world, the first to embrace Cupping Therapy were the ancient Egyptians, and the oldest recorded medical textbook, Ebers Papyrus, written in approximately 1550 BC in Egypt mentions cupping **(23)**.

Sixty percent (60%) of medical schools in the U.S.A. have begun teaching cupping as apart of complementary medicine (CM) . in addition , classes are now advertised in most towns in the U.K**(24)**. It is also being practiced at Harvard Medical School and Johns Hopkins Medical Center , two of the most prestigious medical centers in the world **(25)**.

Cupping Therapy is indicated for blood disorders, pain relief, inflammatory conditions, mental and physical relaxation, varicose veins and deep tissue massage and quotes up to 50% improvement in fertility levels**(26)**.

Study shown that cupping therapy insignificantly reduce fasting and postprandial blood glucose levels &HbA1c when used as a monotherapy for type 2 DM (group I A1)but improve fasting & postprandial blood glucose levels significantly & more ever reduce HbA1c significantly(group II B1) when used in combination with oral hypoglycemic drugs**(27)**.

Wet cupping may be an effective method of reducing LDL cholesterol in men and consequently may have a preventive effect against atherosclerosis**(28)**.

Cupping combined with conventional medicinal therapy has several advantages. It exerts marked improvement on the clinical condition of patients especially visual analogue scale of pain, it significantly reduces the laboratory markers of disease activity and it modulates the immune cellular conditions particularly of innate immune response NK cell % and adaptive cellular immune response SIL-2R. It might be used for monitoring the diseases activity and the effectiveness of therapy. The study recommends the use of BLC therapy together with the conventional therapy in patients suffering from rheumatoid arthritis . More investigations especially those that involve the synovial fluid are needed to elucidate the other modulation effects of BLC on all aspects of immune responses in RA and also in other debilitating diseases(29).

The test for the pulmonary functions and the observation on the changes of clinical symptoms and signs have proved that the cupping therapy used alone can effectively improves the pulmonary functions in asthmatic children , especially for those with mild asthma (30).

Gaeta (2004) says : cupping brings fresh blood to the area so it tends to improve circulation , most commonly it is used for aches and pains of various types as well as respiratory (chest) problems , cough , wheezing , things like that(31).

According to the National Institute of Health (NIH) Consensus Development Panel (1997), acupuncture is also effective against chemotherapy nausea and vomiting, nausea in pregnancy, dental pain, adjunct therapy, addiction, stroke rehabilitation, headache, menstrual cramps, tennis elbow, fibromyalgia, low back pain, carpal tunnel syndrome, asthma and so forth (Lee, 2001) (32).

Today, cupping is used to treat asthma, common cold, chronic cough, indigestion problems, and skin conditions(33). Cupping is most often used to alleviate symptoms of systemic diseases: and conditions such as asthma, arthritis, bronchitis and abdominal pains(34). It is beneficial for dry coughs, asthma, rheumatism, localized swellings, and pain(35).

Other studies demonstrates that cupping also facilitates the flow of lymph, which helps remove bacteria and carry proteins. In addition

to improving the digestive organs, it also strengthens the muscles of the respiratory organs(35) .

Herbal cupping is employed when stiffness and aching occurs, usually in the neck and shoulders (**common cold, asthma and cough**), caused by external pathogens such as cold, damp and wind attacking the body. This method requires bamboo cups, a deep pan, water, metal clamps, fire and herbs(35).

Some of the clinical manifestations include a high fever, a cough with thin yellow phlegm, wheezing and thirst. At this level, cupping treatment is especially effective(36) .

AIM OF THE WORK

The aim of this study is to evaluate the effectiveness of cupping therapy as an adjuvant therapy in the management of patient with bronchial asthma .

SUBJECTS AND METHODS

Fifty asthmatic patients will be included in this study . they will be selected from the outpatient's chest clinic of Ain Shams University Hospitals. Diagnosis of asthma will be according to the revised diagnostic criteria set by (GLOBAL INTIATIVE FOR ASTHMA 2006) .

The patients studied will be divided in two randomly equal matched groups :

Group (1) : (combined treatment group as test)

Included **25** asthmatic patients have the same grade of asthma subjected to complimentary cupping therapy besides the conventional medication set by (GLOBAL INTIATIVE FOR ASTHMA 2006) .

Group (2) : (medicinally treated group as control)

Included **25** asthmatic patients have the same grade of asthma will receive conventional medication only set by (GLOBAL INTIATIVE FOR ASTHMA 2006).

All patients (tests and controls) were subjected to the following for assessment of management :

- **Medical history :** (asthma is often prompted by symptoms such as episodic breathlessness, wheezing, cough, and chest tightness. Episodic symptoms after an incidental allergen exposure, seasonal variability of symptoms and a positive family history of asthma and atopic disease are also helpful diagnostic guides).
- **Clinical examination :** (The most usual abnormal physical finding is wheezing on auscultation).
- **Exacerbations .**
- **Need for rescue medications .**
- **Lung functions .** (full spirometric study to assess the function of large and small airways on regular interval before and after the course of treatment
- **Complete blood picture :** with emphasis on Eosinophilic count .

◆ **Cupping therapy:**

A specific protocol for medical cupping therapy will applied with an intervening 4 week wash out period for 3 successive months . Patients of **group (1)** will be subjected to cupping on specific points which will be selected according to the references of cupping therapy.

Ethical consideration of the study

Patients will be provided with information sheets detailing the research procedure, subject understanding of the research will be considered and a consent form will be provided prior to commencing the study. Subjects wishing at anytime to withdraw from the study, or withhold any information will allowed to do so.

N.B. : Patient with chest or other systemic diseases e.g. hepatic , renal , blood diseases , etc. will be excluded from the study .

Data will be collected and statistically analyzed .

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