



HAND ACUPRESSURE FOR SYMPTOMATIC RELIEF OF CHRONIC RHINITIS

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ABSTRACT

Healthy lifestyle modifications and alternative medicine reduces symptoms, complications, daily medications and drug induced adverse effects in patients of many chronic diseases. 25 known patients of chronic rhinitis were voluntarily participated in the present study that aimed to reduce the symptoms and drug ingestion by 30 minutes of hand acupressure daily. Frequency of symptoms and daily medications for relief of symptoms before the commencement of study and after 3 weeks of regular practice of self-acupressure over the specific acu-points on hand were analysed by "Z test of proportion". It was observed that symptoms were decreased significantly with highly significant decreased in drug ingestion. It was concluded that hand acupressure can reduce the frequency of symptoms and medications in patients of chronic rhinitis.

KEY WORDS: Hand acupressure symptoms chronic rhinitis.

Introduction:

Rhinitis is the commonest upper respiratory disorder affecting 10-30% of population annually. It is inflammation of the mucous membrane of nose caused by pathogens, irritants or allergens. It is manifested by running nose, sneezing, nasal itching, post nasal drip, coughing, headache, fatigue, malaise, redness and watering of eyes (Adelman 2002, Walter et al 2009, Sanclement 2005, Valet & Fahrenholz 2009, Wheeler 2005). Currently available medical therapies are more palliative than curative with unpredictable outcome and generally non-compliant. Antihistamines often cause drowsiness and antibiotics have multiple side effects. Desensitization using injection of antigens requires prolonged administration, high cost and risks of anaphylactic shock (Walter et al 2009, Quillen & Feller 2006, Lee 2014).

Recently reviewed interest in acupuncture and acupressure has prompted the use of the acupressure and acupuncture in the their use treatment of various chronic disorders (Lee 2014).

Ample of studies were conducted on acupuncture for treatment of respiratory disorders like allergic rhinitis, bronchiectasis, bronchial asthma (Maa et al 2003,2007, McCarney 2004) with favourable outcomes but very few studies were documented on acupressure. Hence the present study was designed to evaluate the effect of daily 30 mins of hand acupressure for regular 3 weeks in symptomatic relief of chronic rhinitis.

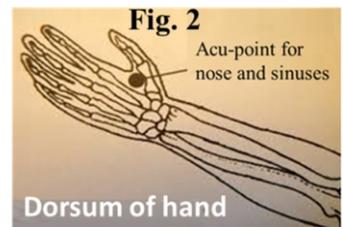
Materials and Methods:

After explaining the causes, complications, drug induced adverse effects of drugs used for chronic rhinitis and health benefits of acupressure in simple and comprehensive language, 25 patients of chronic rhinitis (diagnosed on the basis of duration/chronicity of symptoms and symptomatic relief after antihistaminic, decongestants and/or antibiotics) attending evening OPD were participated in the study with their informed consent. General particulars of the patients including name, age, etc., present history of symptoms, relevant past history, personal history and relevant family history were entered in case sheet cum informed consent form.

Inclusion criteria: Patients of both sexes with age ranging between 20-60 years having mild to moderate symptoms of chronic rhinitis for more than 6 months duration relieved by antihistaminic, decongestant and/or antibiotics.

Exclusion criteria: Children and pregnant women, severely ill patients of chronic rhinitis, patient with lower respiratory tract infections and other system disorders.

They were taught the correct technique of palm acupressure with a live demonstration as shown in fig.1. A firm but gentle on and off pressure is applied by squeezing the back of web between thumb and index finger of one hand with thumb and the index finger of other hand (25-32) for 1 sec each time for 2-3 minutes alternately with comfort as shown in fig 1 and 2. It is repeated for 30 minutes a day preferably before food or 2 hours after meals. Technical difficulties were solved during follow up visits. After 3 weeks, their symptoms and frequency of drug ingestion were reviewed followed by analysed with Z test of proportion.



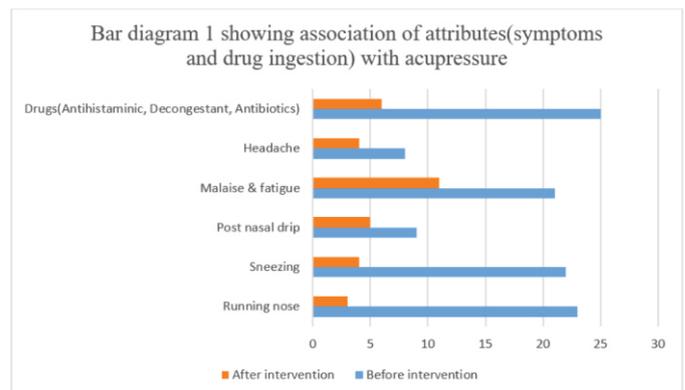
Observations and Results:

After analysis it was observed that number of patients with attributes were decreased significantly as signified by the Z2 test of individual attributes. All the symptoms were decreased significantly with z score of 8.02 for running nose, 6.23 for sneezing, 1.53 for post-nasal drip, 0.63 for malaise & malaise, 1.23 for headache and 6.13 for drug (antihistaminic, decongestant and/or antibiotics) as shown in following Table 1 and Bar diagram 1.

Table 1. Showing number of patients with symptoms of chronic rhinitis and drug ingestion before and after 3 weeks of palm acupressure (N=25)

Symptoms	No. of patients		Z score	Significance
	Before intervention	After intervention		
Running nose	23	3	8.02	***
Sneezing	22	4	6.23	***
Post-nasal drip	9	5	1.53	**
Malaise and fatigue	21	11	0.63	**
Headache	8	4	1.23	**
Drugs (Antihistaminic, Decongestant, Antibiotics)	25	6	6.13	***

probability (p) value of ≤ 0.05 was taken as significant. N- number of patients
 ** Significant, ** Highly significant.



Discussion:

Western medicine deals with causative agents of disease entities and specific treatments, while acupuncture and acupressure, Chinese techniques adopt a holistic approach aiming maintenance of health by restoring balance of body functions. During acupressure, somatic afferents primarily convey the input signals from acu-points to different levels of central nervous system, including spinal cord, brainstem, sensory cortex, peri-aqueductal gray mater and autonomic nervous systems which send the descending impulses to the effector organs including nose. Opioid peptides and other neurotransmitters mediates their targeted actions (Y.Sung 2003)

Several studies were conducted on acupuncture targeting various respiratory disorders. Kim et al (2009) evaluated the effectiveness of acupuncture as a treatment for persistent allergic rhinitis with significant nasal score (rhinorrhoea, sneezing, and itching) and non-nasal symptom score (headache, fatigue) after 3 times/week of acupuncture intervention for 4 weeks. Xue et al (2007) also suggested acupuncture for persistent allergic rhinitis from their study result on 80 patients with significant reduction in rhinorrhoea with 12 weeks of active intervention.

Active acupuncture had significantly greater effect on symptoms of allergic rhinitis than sham acupuncture in 238 patients after acupuncture intervention of 3 times per week for 4 weeks (Choi SM et al 2013). Ng et al (2004) showed that 8 weeks of acupuncture was more effective than sham acupuncture in decreasing the symptom scores for persistent allergic rhinitis and increasing the symptom-free days in 85 children. The results of the study (Brinkhaus et al 2008) suggested that traditional Chinese therapy may be an efficacious and safe treatment option for 52 patients with seasonal allergic rhinitis after 6 weeks of intervention.

Effectiveness of acupressure in improvement of several symptoms were evaluated in few studies. Tsayet al (2004) found that the application of 12 minutes of acupressure 3 times a week for four weeks significantly reduced fatigue and improved sleep quality in patients of respiratory disorders. Wu and colleagues (2004, 2007) found that 4 weeks of daily 16-minute acupressure was effective in improving pulmonary function, oxygen saturation, dyspnoea and anxiety when compared to a placebo group that received acupressure at an inappropriate location in patients with chronic obstructive pulmonary disease (COPD). In another study of patients with COPD, Tsay et al (2005) found that 12 minutes of daily acupressure for 10 days improved dyspnea, anxiety, blood pressure, heart rate and respiratory rate when compared to a control group receiving only massage.

Two studies by Maa and colleagues (2003, 2007) found that 2.5–10 minutes of daily acupressure for 8 weeks significantly improved dyspnea and respiratory health-related quality of life in patients with bronchiectasis and asthma when compared to group receiving medication and chest physiotherapy. Song et. al (2015) revealed significant improvements in symptom scores in patients of allergic diseases involving respiratory system and stress/fatigue scores in healthy people by self-acupressure.

Dodd (2001) and Eun & Frazier (2011) concluded that acupressure may be a useful strategy for the management of multiple symptoms in a variety of patient populations which may improve patient outcomes.

Hence our study concluded that hand acupressure can reduce the frequency of symptoms and medications in patients of chronic rhinitis.

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