

A Pilot of Study on the Short Term Effect of Anulom Vilom Pranayama to Enhance the Breath Holding Capacity of Students

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Abstract:

Yoga is a technique towards the improvement of total health by acting on physical and mental level. This present study has been undertaken to examine the effect of Pranayama on breath holding capacity of students. Ten students of B.A.M.S. were randomly registered voluntarily, aged 18-28 years to participate in this study from Yoga unit of Swasthavritta department of in our College of Ayurved. During Anulom Vilom pranayama, breath holding capacity was increased near about double of its normal duration. Difference between mean of breath holding time, before and during Anulom Vilom Pranayama, is about 31.6 and T value is 6.0733 and P value is <0.001 and it is highly significant on statistical parameters. In Anulom vilom the rate of exchange of air in alveoli and the ventilation at the lower areas of lungs increase, which increases the oxygen and decreases the carbon di-oxide level in blood, which increased the breath retention during the practice of this pranayama.

Key Words: Anulom Vilom pranayama, Breath holding.capacity, yoga

Introduction:

Yoga is one of the most popular sciences of the present era. It included all aspect of health i.e. physical, mental, social and spiritual. Yoga means the cessation of mental modifications Chitta-vritti of mind, intellect, and ego. This can be attained only with the practice of Yogic techniques. The yogic techniques are well described in Patanjala Yoga Sutra in the form of eight stages i.e. Yama, Niyamam, Asana Pranayama, Pratyahara, Dharans Dhyana, Samadhi. Among these practices, Pranayama is a technique of breath control. It included three stages i.e., Puraka (inhalation) Kumbhaka (breath holding) and Rechaka (exhalation). Kumbhaka are further divided into eight types i.e., Suryabhedanam, Ujjayi, Sitkari, Shitali, Bhastrika, Bhramari, Murchha and Plavini.

In the present study Anulom vilom has been considered to show its short term effect on breath holding capacity. Deep inhalation and exhalation of breath. The breath holding is a voluntary act. A longer breath holding time indicates good concentration of oxygen in blood and a lesser concentration of carbon dioxide in blood. Breath holding time can be increased by the regular practice of Pranayama. In present study the instant effect of Anulom vilom Pranayama was observed to enhance the breath holding capacity.

Anulom Vilom Pranayama is one of several Pranayama or breathing exercise used in the practice of Hatha yoga. At first you have to understand the meaning of Anuloma and Viloma. In this the first word Anu roughly translates as with and word Loma mean hair implying "with the grain" or "natural". And meaning of Viloma is "against the grain." Anuloma is opposite to Viloma, It is very helpful in respiratory related diseases like Asthama. Anulom Vilom Pranayama is the best way to balancing the Tri dosas in our body. Our body get ill when Tri dosas are not in balancing position. Vaat Pitta, Kafa are know as Tri dosas, Tri means "three" and the meaning of dosas is impurities. All these are present in body of every people. If one of them is imbalance than we suffer from different diseases. All of three are the cause of all diseases. So it's important to balance these tri dosas. If you really want to balance these Tri dosas than do Anulom vilom pranayam regularly. It is the simplest and best way for this.

Aims & Objectives:

In this present time where nothing is safe regarding the human health, everybody search for the techniques to promote the health and prevent the diseases. Yoga is such a technique towards the improvement in total health. Various researches have been conducted to see the effect of different yogic practices. In this channel the present study has been

under taken to examine the effect of Anulom vilom Pranayama on breath holding capacity of students.

Materials & Methods:

Following materials and methods were adopted for conducting for present study.

Materials:

Ten students of B.A.M.S. were randomly registered voluntarily aged 18-30 years to participate in this study. The cases having any systemic disease, abnormal vitals were excluded from the study. Observations were analyzed by using Paired T test

Methods:

- 1) Sit in a steady asana. Padmasana is most suited for the practice. Siddhasana and Vajrasana may also be used.
- 2) Close the right nostril with your thumb and draw in air from the left nostril. Do this as slowly as you can, till your lungs are full.
- 3) Now release the thumb and close the left nostril with your ring finger. Then breathe out stowly through the right nostril.
- 4) Next take the air in from the right nostril and then release it through the left nostril (after closing the right nostril with the thumb).
- 5) This is one round of Anulom Vilom Pranayama.
- 6) Start with 5 rounds& increase it up to 20 rounds in one sitting.
- 7) Also, the duration of inhalation can start from 2 seconds and go up to 20 seconds or even beyond.
- 8) One can have one sitting in the morning and one in the evening For advanced practitioners, the yogic texts recommends four sittings-one in the morning, one at noon, one in the evening and one at midnight. But for all practical purposes, two sittings (one in morning and one in evening) are enough.
- 9) After one has reached a certain level of proficiency, one can add Kumbhaka or retention of breath to the practice.

Observation and Result:

The study was conducted to determine the effect of Anulom Vilom Pranayama on the breath holding capacity of students and following findings were recorded.

Table no. 1
Effect of Anulom Vilom Pranayama on breath holding time

S.N.	Registration numbers	Breath holding time in seconds (Before pranayama)	Breath holding time in seconds (During pranayama)
1	67	43	85
2	68	29	64
3	69	45	67
4	70	27	53
5	71	27	41
6	72	26	51
7	73	34	60
8	74	39	90
9	75	40	82
10	76	32	65

Table no 2-
Effect Anulom vilom on breath holding time

Registration Number	Breath holding time in seconds (Before pranayama)	Breath holding time in seconds (During pranayama)	Difference of means	T value	P value
10	34.2+7.1893	65.8+15.82503	32.5	6.172	<0.001

Before Pranayama /After Pranayama:

Table show that during Anulom vilom Pranayama, breath holding capacity was increased near about double of its normal duration. Difference between mean of breath holding time, before and during Anulom vilom Pranayama, is about 6.172 and P value is <0.001 and it is highly significant on statistical parameters.

Discussion:

Yoga is a technique to control the fluctuation of mind, and to concentration in Atma-tatva. In the process of Yoga there are many hurdles, respiration is is one of the priorities in Yogic techniques achieved through Pranayama Pranayama is regularly practiced to smoothen theinhalation (Puraka) and exhalation (Rechaka) and to enhance the period of breath retention (Kumbhaka) to minimize the

disturbance in the process Dharana,Dhyana and Samadhi.

Anulom Vilom Pranayama is the ideal pranayama for healthy heart. Anulom Vilom Pranayama is also known as Nadi shodhana pranayam (alternate nostril breathing). It is next level of Anulom Vilom. In Anulom Vilom Pranayama we inhale and exhale, but in Nadi shodhana pranayam we hold (kumbhaka or retention) our breath for a second or minute than exhale.

It Helps to cure mental problems like Depression, Anxiety Tension etc. Most beneficial for breathing related problems like (Bronchitis, Asthama) etc. Improve the working of lungs. This Pranayama increases the rate of exchange of air in alveoli and increases the ventilation at the lower areas of lungs, which increases the oxygen and decreases the carbon di-oxide level in blood. Finally the period of breath retention is increased during the practice of this pranayama. This study also support this hypothesis.

Conclusion :

In this pilot study of single practice of Anulom vilom Pranayama, very significant result was observed. Therefore, a lot of scope of work regarding pranayama is there. Study should be conducted to see the long term effect of Anulom vilom Pranayama on breath holding capacity, pulse rate, B.P, respiratory rate, functional capacities of lungs.

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