



STUDY OF PROBABLE ANATOMICAL STRUCTURE RELATED WITH ADNYA CHAKRA

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ABSTRACT

Shatchakra is the concept elaborated in Ayurveda science. This is the concept explained in Rachana Sharir, having a Yogic as well as spiritual base. According to yoga-shashtra, Ida, Pingala and Sushumna are three nadies, these nadi controls pran vayu and performs various activities in the body. Whereas 6 chakras are associated with all these three nadis situated in the body. As Sushumna at centrally and Ida and Pingala on either side to Sushumna nadi .the shat chakra are Muladhar chakra, Swadhisthan chakra, Manipur chakra, Anahtat chakra, Vishudhha chakra, adnya chakra. In this research project the scholar has tried to confirm the anatomical structure related with Adnya chakra. For this study the scholar has selected 80 individuals of the age

30 to 50 years of either sex. After the selection of the patients, yogic kriya i.e. Anulom-vilom kriya was taught. Regular follow up was taken for before and after treatment. From above case study its observed that above mention kriya reduce the mental stress pineal gland located near the middle of brain lies under of Adnya chakra. Above mention yogic kriya helps reduce mental stress. Whereas pineal gland considered as neuro endocrine –transducer which is responsible for the seasonal changes .pineal gland is known to have anti-sressogenic effect pineal gland is relieving stress .The singnificant effect of melatonin on various secretion and function during stress. Scholar has taken efforts to establish the relation of adnya chakra with pineal gland. Whereas yogic kriyas has an effect on adnya chakra and also reducing stress, modern stress is related with pineal gland. So pineal gland has an connection with Adnya chakra. The Chakras are represented as energy centers aligned along the spinal cord, which

form an integrating channel. They serve as collection and transmission centers for both subtle, and metaphysical, energy and concrete, or biophysical, energy. Chakras are even more involved with the Nadis: conduits that disperse life energy (called Prana) throughout the body. There are seven primary Chakras. From lowest to highest they are Muladhara Chakra (root Chakra), Svadhishthana Chakra (sacral Chakra), Manipura Chakra (solar or navel Chakra), Anahata Chakra (heart Chakra), Vishuddha Chakra (throat Chakra), Ajna Chakra (third eye Chakra) and Sahasrar Chakra (Crown Chakra). The Ajna Chakra is located in between the eyebrows. It is also called as third eye Chakra so it is our center of intuition. The pineal gland is a photosensitive organ and it is correlated with adnya chakra.

KEYWORDS: Adnya Chakra, Pineal Gland, Nadi Shodhan Pranayam-Anulom-Vilom.

❖ INTRODUCTION

प्राणाः प्राणभूताम् यत्राश्रिताः सवेन्द्रियाणी च |

षट्ततमांगमगानां शिरः तदभिधीयते || [सु.शा.५/६३]

This verse tells that the place of sachetan sharira and all related indriyas along with dominant organ in the body is called 'Shir'

Now a days yogic science is developing very fast and with the help of yogic kriya treatment of disease related to sthana of chakra is very economical and easy to follow.

Many study has been done in Rachana Sharir about sthula sharir but not many studies have been performed on sookshma sharir and yogic view.

Ayurveda is inter related science with science of Religion and science of Yoga.

योगे मोक्षे च सवाहसां वेदनानामवताहनम् ||

मोक्षे निवृत्ततीनिदःशेषा योगो मोक्षपावताहकः ||

(चरक शारीरस्थान 11/37)

In Moksha the cessation is complete while yoga leads to that In yoga science Shat chakra are mentioned. These Shat chakras are as follows:

In yogic shastra – *IDA, PINGLA & SUSHUMNA* are 3 nadis that controls prana vayu & performs all other activities in the body.

- **Shat-chakras** – vital points located along axial region of body with Ida & Pingala on its either side.
- These are
 1. MOOLADHAR CHAKRA 2. SWADHISHTHAN CHAKRA
 3. MANIPUR CHAKRA 4. ANAHAT CHAKRA
 5. VISHUDHA CHAKRA 6. ADNYA CHAKRA
- **SAHASRARA CHAKRA** = This chakra controls all above 6 chakra
- Shat -chakra works along with Ida, Pingala & Sushumna nadis.
- Chakras considered as life energy or prana which shows nerve plexuses (network of nerves and adjacent organs.)
- The human being is consists of “Three Bhavas.”
 1. Aadhyatmik Bhav - this bhav is treated as sukshma sharir.
 2. Aadhibhautik Bhav - this bhav is treated as sthula sharir.
 3. Adhidaivik bhav- this bhav is treated as karan sharir.

The same is called as “Spruk-Sharir.”- According to charakacharya.

Avidya, Asmita, Raga, Dvesha, Abhinivesha these five doshas may attack the Karan sharir means Aadhidaivik bhav. Treatment of these doshas is mentioned in Yoga Science.

There is study proceeding indetail on sthul sharir but not on Sukshma sharir; and there is requirement to study the sukshma sharir as far as research in Rachna sharir is concern.

So that, out of these Shatchakras I would like to study “Adnya chakra” and has tried to confirm anatomical structure related with Adnya chakra.

AIM AND OBJECTIVES

AIM- To confirm the anatomical structures related with adnya chakra

OBJECTIVES; To study the effect of NADI SHODHAN PRANAYAM and its relation with Pineal gland.

MATERIAL AND METHODS

Individuals of either sex of 30 to 50 yrs were considered for the research project. Individuals of either sex were taken for the present study.

Material used for clinical study

1. Camera - For photography
2. Questionnaire - For collection of information.
3. "80" Volunteers - Selected for clinical study.
4. Information sheet.

CLINICAL STUDY

- 1) **To study the effect of NADI SHODHAN PRANAYAM and its relation with Pineal gland**

Number of patients– total 80 patients

2. Inclusion criterion

- Random selection of patients having stress .
- Patients of either sex - 30yr to 50yr

3. Exclusion criterion

- Pregnant Female.
- Patients having Other chronic Diseases (Hypertension, Asthama, D.M)
- Patient under treatment of stress.

Methodology

The detail information of the individuals was taken by information sheet with details of the concern lakshana.

Nadi –shodhan pranayam was taught under the yoga expert daily by following method- (Approx 6 rounds in 1 minute.)

- a) Sit in position, close the eyes and settle down.
- b) With the right thumb close the right nostril.
- c) Inhale slowly through the left nostril until the maximum capacity.
- d) Hold the breath (Not for beginners, hypertension, and asthma people).
- e) With the right hand`s middle and ring fingers close the left nostril.
- f) Release the right thumb and exhale slowly.

- g) Now inhale through right nostril.
 h) Hold the breath.
 i) Exhale through left nostril

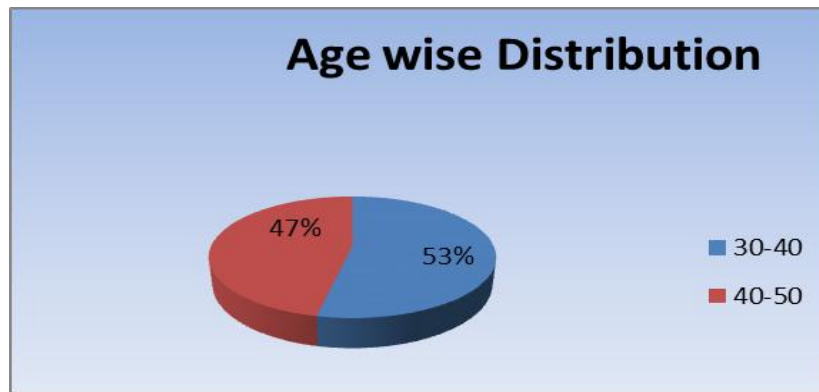


OBSERVATION AND RESULTS

OBSERVATION				Table No. 2 (After Giving Treatment)			
<i>Table No. 1 (Before Treatment)</i>				<i>Case no: 1</i>			
<i>Case no.: 1</i>				Contain	Mild	Moderate	More
Contain	Mild	Moderate	More	Frustration		√	
Frustration		√		Increase in anger level	√		
Increase in anger level		√		Eating	√		
Eating	√			Digestive problems	√		
Digestive problems		√		Weight loss	√		
Weight loss	√			Sleep problem		√	
Sleep problem			√	Inability to Concentrate		√	
Inability to Concentrate		√		Poor Judgment	√		
Poor Judgment	√						30

AGE WISE DISTRIBUTION

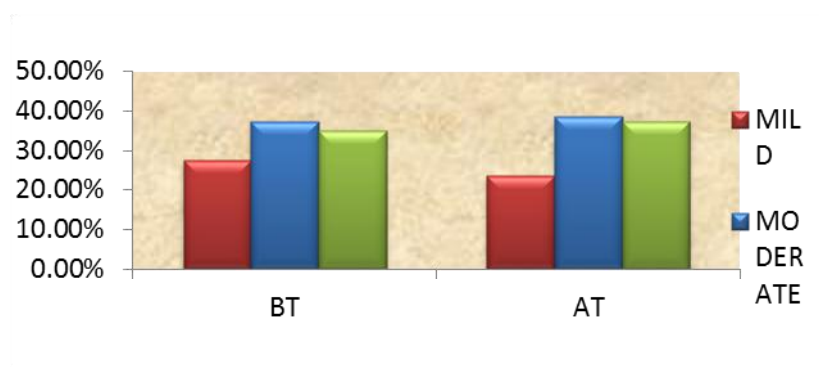
Age	No of pts
30-40	40
40-50	35



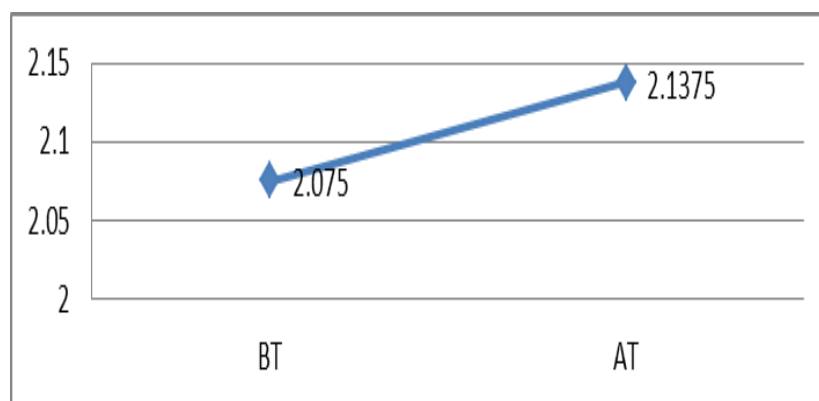
From the above table and diagram we found that maximum no of pts found in the age group of 30-40Yrs.

Effect of Nadi Shodhan Pranayam On Frustration

Grade	BT		AT	
	No. of patients	BT	No. of patients	AT
Mild	22	27.50%	19	23.75%
Moderate	30	37.50%	31	38.75%
More	28	35.00%	30	37.50%



From above table and diagram we found that in 35%, 37.50% and 27.5% of patients more, moderate and mild Frustration were found Before Pranayam which was changed to 35%, 38.75% and 23.75%



parameter	Mean		x	% of improvement	Positive rank	Negative rank	Tie	Z	P VALUE
	BT	AT							
Frustration	2.075	2.1375	0.0625	3.01%	29	27	24	-0.5417	0.588

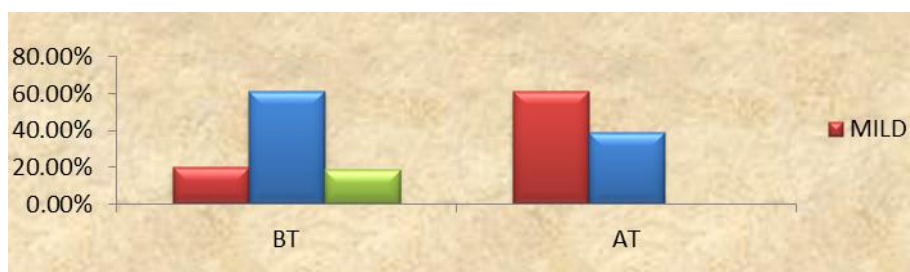
The mean grade of Frustration before nadi shodhan pranayam was 2.075 which was increased to 2.1375 after treatment.

The mean increment in score was 3.01% but it is not significant as observed by wilcoxon test (P Value $0 > .05$) thus it can be said that there is not significant increment on Frustration.

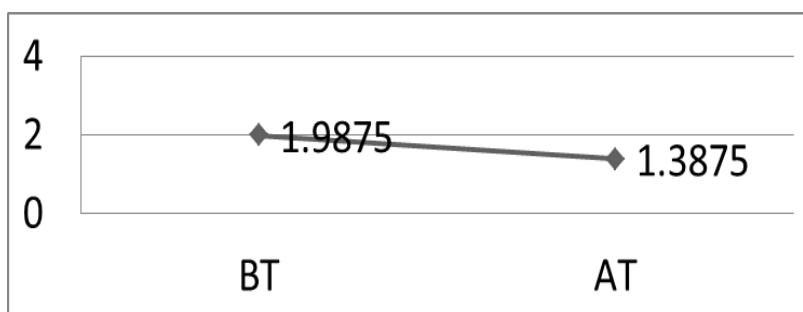
i.e. Nadi shodhan pranayam was not effective on Frustration

- **Effect of Nadi Shodhan Pranayam On Increase in anger level**

Grade	BT		AT	
	No. of patients	BT	No. of patients	AT
Mild	16	20.00%	49	61.25%
Moderate	49	61.25%	31	38.75%
More	15	18.75%	0	0.00%



From above table and diagram we found that in 18%, 61.25% and 20% of patients more, moderate and mild Increase in anger level were found Before Pranayam which was decreased to 0%, 38.75% and 61.25%



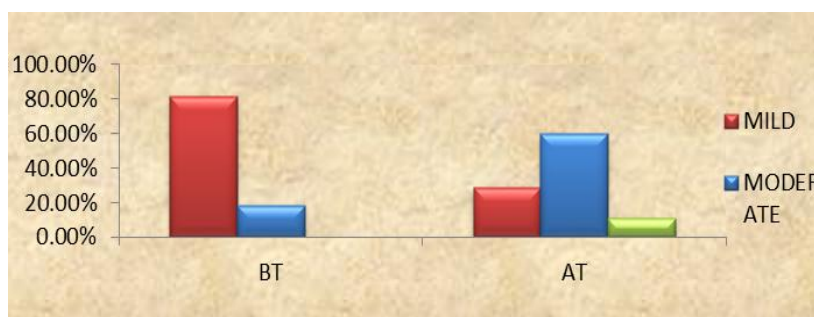
Parameter	Mean		x	% of improvement	Positive rank	Negative rank	Tie	Z	P VALUE
	BT	AT							
Increase in anger level	1.9875	1.3875	0.6	30.19%	6	49	25	-5.719	1.07E-08

The mean grade of Increase in anger level before nadi shodhan pranayam was 1.98 which was decreased to 1.38 after treatment. The mean increment in score was 30.19% which is significant as observed by wilcoxon test (P Value $0 < 0.05$) thus it can be said that there is significant increment on Increase in anger level

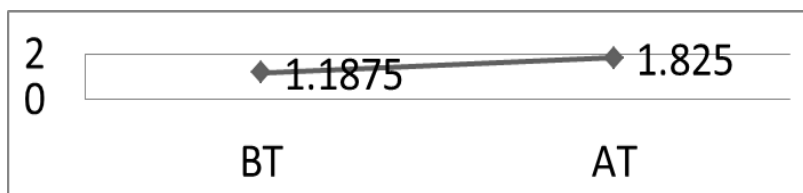
i.e. nadi shodhan pranayam was effective on Increase in anger level

- **Effect Of Nadi Shodhan Pranayam on Eating Quantity**

Grade	BT		AT	
	No. of patients	BT	No. of patients	AT
Mild	65	81.25%	23	28.75%
Moderate	15	18.75%	48	60.00%
More	0	0.00%	9	11.25%



From above table and diagram we found that in 0%, 18.75% and 81.25% of patients more, moderate and Eating Quantity were found Before Pranayam which was changed to 11.25%, 60% and 28.75%



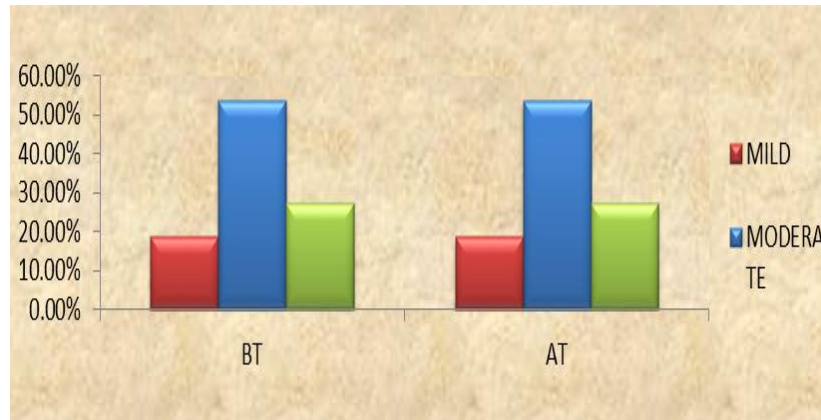
parameter	Mean		x	% of improvement	Positive rank	Negative rank	Tie	Z	P VALUE
	BT	AT							
Eating more or less	1.1875	1.825	0.6375	53.68%	48	6	26	-5.6184	1.92E-08

The mean grade Eating more or less before nadi shodhan pranayam was 1.1875 which was increased to 1.825 after treatment. The mean increment in score was 53.68% which is significant as observed by wilcoxon test (P Value $0 < 0.05$) thus it can be said that there is significant increment on Eating more or less.

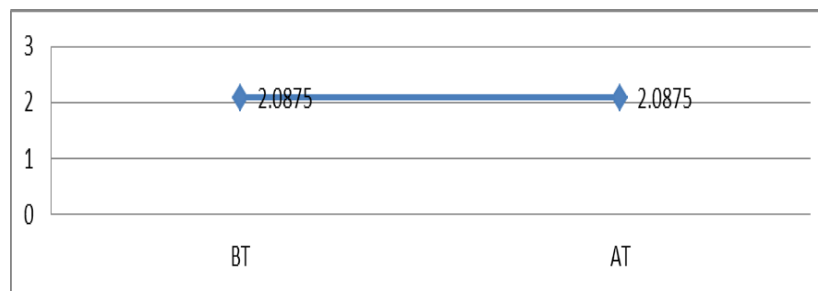
i.e. nadi shodhan pranayam was effective on Eating more or less.

- **Effect of Nadi Shodhan Pranayam on Digestive problems**

Grade	BT		AT	
	No. of patients	BT	No. of patients	AT
Mild	15	18.75%	15	18.75%
Moderate	43	53.75%	43	53.75%
More	22	27.50%	22	27.50%



From above table and diagram we found that in 27.5%, 53.75% and 18.75% of patients more, moderate and Digestive problems were found Before Pranayam which was changed to 27.5%, 53.75% and 18.75%



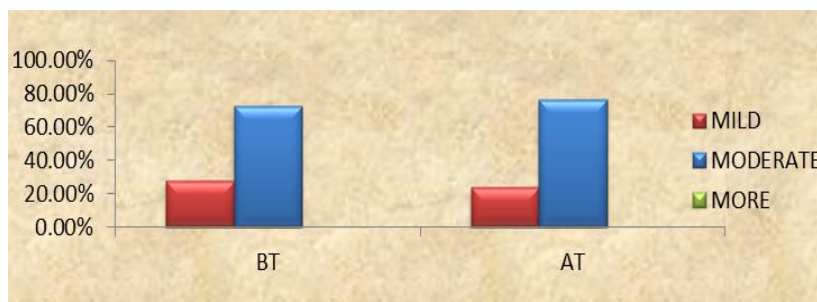
parameter	Mean		x	% of improvement	Positive rank	Negative rank	Tie	Z	P VALUE
	BT	AT							
Digestive problems	2.0875	2.0875	0	0.00%	0	0	80	-5.6184	1

The mean grade of Digestive problems before nadi shodhan pranayam was 2.08 which was same as 2.08 after treatment. The mean increment in score was 0% which is not significant as observed by wilcoxon test (P Value $0 > .05$) thus it can be said that there is not significant increment on Digestive problems.

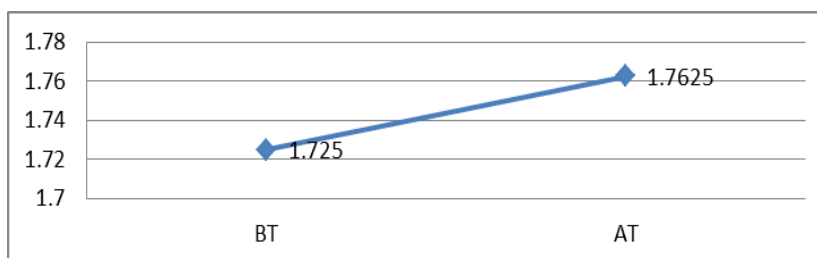
i.e. nadi shodhan pranayam was not effective on Digestive problems

– Effect of Nadi Shodhan Pranayam on Weight loss

Grade	BT		AT	
	No. of patients	BT	No. of patients	AT
Mild	22	27.50%	19	23.75%
Moderate	58	72.50%	61	76.25%
More	0	0.00%	0	0.00%



From above table and diagram we found that in 0%, 72.5% and 27.5% of patients more, moderate and Weight loss were found Before Pranayam which was changed to 0%,76.25% and 23.75%



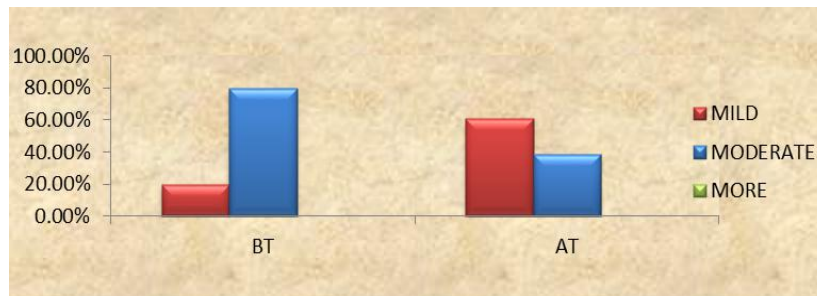
parameter	Mean		x	% of improvement	Positive rank	Negative rank	Tie	Z	P VALUE
	BT	AT							
Weight loss	1.725	1.7625	0.0375	2.17%	16	13	51	- 0.5570	0.5773

The mean grade of Weight loss before nadi shodhan pranayam was 1.725 which was increased to 1.7625 after treatment. The mean increment in score was 2.17% but it is not significant as observed by wilcoxon test (P Value $0 > .05$) thus it can be said that there is not significant increment on Weight loss.

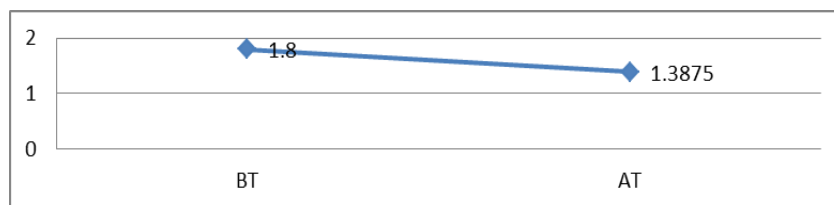
i.e. nadi shodhan pranayam was not effective on Weight loss

– Effect of Nadi Shodhan Pranayam On Sleep problems

Grade	BT		AT	
	No. of patients	BT	No. of patients	AT
Mild	16	20.00%	49	61.25%
Moderate	64	80.00%	31	38.75%
More	0	0.00%	0	0.00%



From above table and diagram we found that in 0%, 80% and 20% of patients more, moderate and Sleep problems were found Before Pranayam which was decreased to 0%, 38.75% and 61.25%



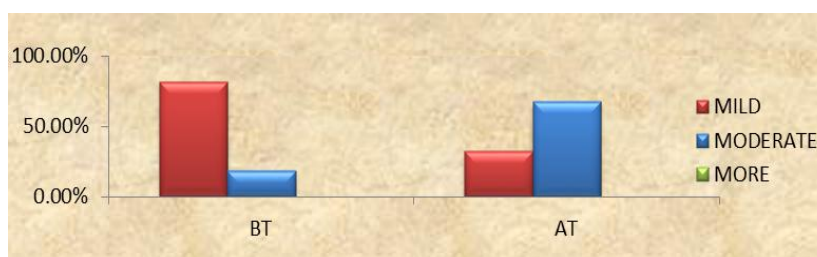
parameter	Mean		x	% of improvement	Positive rank	Negative rank	Tie	Z	P VALUE
	BT	AT							
Sleep problems	1.8	1.3875	0.4125	22.92%	6	39	35	-4.919	8.6E-07

The mean grade of Sleep problems before nadi shodhan pranayam was 1.8 which was decreased to 1.3875 after treatment. The mean increment in score was 22.92% which is significant as observed by wilcoxon test (P Value $0 < 0.05$) thus it can be said that there is significant increment on Sleep problems

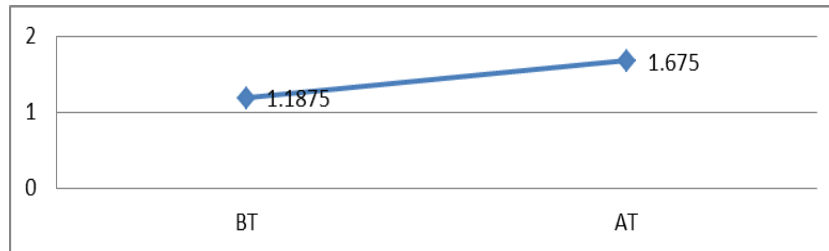
i.e. nadi shodhan pranayam was effective on Sleep problems.

• **Effect of Nadi Shodhan Pranayam on Inability to concentrate**

Grade	BT		AT	
	No. of patients	BT	No. of patients	AT
Mild	65	81.25%	26	32.50%
Moderate	15	18.75%	54	67.50%
More	0	0.00%	0	0.00%



From above table and diagram we found that in 0%, 18.75% and 81.25% of patients more, moderate and Inability to concentrate were found Before Pranayam which was increased to 0%, 67.5% and 32.5%



parameter	Mean		x	% of improvement	Positive rank	Negative rank	Tie	Z	P VALUE
	BT	AT							
Inability to concentrate	1.1875	1.675	0.4875	41.05%	45	6	29	-5.46109	4.73E-08

The mean grade of Inability to concentrate before nadi shodhan pranayam was 1.1875 which was decreased to 1.675 after treatment. The mean increment in score was 41.05% which is significant as observed by wilcoxon test (P Value $0 < 0.05$) thus it can be said that there is significant increment on Inability to concentrate

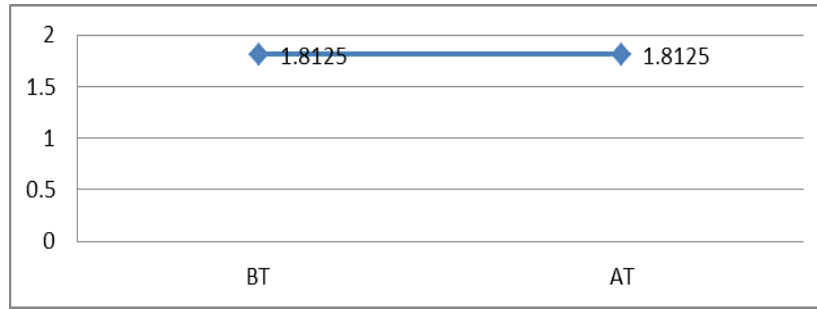
i.e. nadi shodhan pranayam was effective on Inability to concentrate

– Effect Of Nadi Shodhan Pranayam On Poor judgments

Grade	BT		AT	
	No. of patients	BT	No. of patients	AT
Mild	15	18.75%	15	18.75%
Moderate	65	81.25%	65	81.25%
More	0	0.00%	0	0.00%



From above table and diagram we found that in 0%, 81.25% and 18.75% of patients more, moderate and Inability to concentrate were found Before Pranayam which was changed to 0%, 81.25% and 18.75%



parameter	Mean		x	% of improvement	Positive rank	Negative rank	Tie	Z	P VALUE
	BT	AT							
Poor Judgments	1.8125	1.8125	0	0.00%	0	0	80	-5.46109	1

The mean grade of Poor Judgments before nadi shodhan pranayam was 1.8125 which was same as 1.8125 after treatment. The mean increment in score was 0% which is not significant as observed by wilcoxon test (P Value $0 < 0.05$) thus it can be said that there is no significant increment on Poor Judgments i.e. nadi shodhan pranayam was not effective on Poor Judgments.

Result of nadi shodhan pranayam on lakshana

Statistical analysis we can conclude that significant difference observed between before and after treatment.

Using wilcoxon test p- value for before and after treatment is less than 0.05 we can conclude that effect is significant after treatment on lakshana.

Complaints	Result after treatment
Frustration	Not effective
Increase in anger level	Effective
Eating	Effective
Digestive problems	Effective
Weight loss	Not effective
Sleep problems	Effective
Inability to concentrate	Effective
Poor judgment	Not effective

From the above result we can interpret that nadi shodhan pranayam was moderately effective on stress.

DISCUSSION

The ultimate aim of Ayurveda is to maintain or keep swasthya of swastha purush and cure the diseases of patients and try to keep them healthy and away from the disease.

- **Yogic kriya** has great role to prevent and cure many of the so called life-style disorder. Practice of certain Asana or yogic kriya control our mind and get relief from Luxurious, Stressful lives and being swashtha in Ayurvedic science.
- Shatchakra are related to nerve plexus, Endocrine gland which are ultimately control body along with Utamang shir.
- Anulom vilom pranayam helps to stimulate nervous system and Stimulate the chakra, balances the prana within the body.
- Sthanagata yogic kriya stimulates related Plexus and organ, also reduces disease related to chakra.
- Yogic kriyas has great role to prevent and cure many of the diseases. Yogic kriya stimulates related plexus and organ, also reduces disease related to chakra.
- As Adnya chakra is situated in between two eye brows.
- After practice of yogic kriya related to sthan of Adnya Chakra reduce the (mental stress)related to sthan of adnya chakra
- Nadi shodhan pranayam it helps to reduce mental stress.
- The nadi shodhan pranayam stimulates Adnya chakra.
- And stress is having connection with Pineal gland.
- In this research work, the scholar has selected the patients those were having already mental stress.
- From the above result we can interpret that nadi shodhan pranayam was moderately effective on stress.

The analysis of the observation shows the difference between before and after treatment .The outcome of the research projects shows the considerable difference between before and after treatment.

CONCLUSION

Experimentally in the individual the status of mental stress was moderately reduce after giving nadi shodhan pranayam statistically it was proved that there was statistically significant difference seen in before and after treatment. So it can be stated that nadi shodhan pranayam is help to reduce mental stress of related to sthan of chakra.

Mind and body are interrelated to each other. So each and every physician should think about chakra system which effects both mind and body.

Experimentally it is observed that stress is reduced after Anulom –vilom pranayam & statistically it was proved that there was significant association between the before and after the treatment as. Anulom vilom pranayam related to Adnya chakra & stress work under the umbrella of pineal gland So we can confirm that pineal gland contribute the structure of Adnya chakra.

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