



A CRITICAL STUDY OF ASTHAU NINDITEEYA ADHYAYA W.S.R TO ATIKRISHA AND IT'S MANAGEMENT WITH SANTARPANA MANTHA

Dr. Kshirasindhu Seth¹, Dr. Manoj Kumar Sahoo², Dr. PanchananaKisan³

¹M.D Scholar , P.G Department of Ayurveda Samhita & Siddhanta , GAC & H Balangir , Odisha

²Principial, P.G Department of Ayurveda Samhita & Siddhanta, GAC & H Balangir , Odisha ³Lecturer & I/C HOD
P.G Department of Ayurveda Samhita & Siddhanta ,GAC & H Balangir ,Odisha

**Corresponding Author : Dr. Kshirasindhu Seth, M.D. Scholar, Department of Ayurveda Samhita & Siddhanta ,
GAC & H Balangir , Odisha**

ABSTRACT

Background – Undernutrition (Karshya) is globally considered as a major health hazards in the developing countries of the world Under nutritional status is sensitive indicator of community health & nutrition . Under nutrition which is directly known as wasting (low weight for height) , stunting (Low height for age) , underweight (Low weight for age) .

Materials and Methods - Thirty patients were taken for the study and all patients were taken in a single group

Result and Discussion - During the entire duration of therapy, there was not any adverse/untoward effect or adverse drug reactions observed for the trial group.

Conclusion – The effect of the medicine , that is , Santarpana Mantha is more significant in the subjective and objective parameters The mechanism of action of this Mantha over this body is Saptadhatu Vardhaka with Vrishya . Hence the patient gets recovered gradually .

1.INTRODUCTION

According to Acharya Charaka, over lean (Karshya) persons are considered under eight despicable persons (Ashtauninditiya)¹ along with over obese (Medasvi) person. Ayurvedic treatment aims not only at the radical removal of the causative factors of the disease but also at the restoration of Doshik equilibrium. According to Acharya Charak principle of treatment for Karshya is Laghu Santarpana . Hence Santarpana Mantha is used in the Atikarshya patient . Santarpana Mantha is combination of six drugs i.e Sharkara , Pippali , Taila , Ghrita , Madhu and Sattu . Vrishya and Saptadhatu Vardhaka of this Yoga play crucial role in mitigating the symptom of Karshya .

1.2 AIMS AND OBJECTIVES

1. To make the critical analysis of “ Ashtauninditeeya Adhyaya “ on the basis of practical approach .
2. To study the applicability of conceptual part that has been described in Ashtauninditeeya Adhyaya w.s.r to Atikrusha.
3. To study the effectiveness of application of Santarpana Mantha in Atikrusha .

2. MATERIALS AND METHODS

- Source of patients: Patients were selected from OPD and IPD of Government Ayurvedic College and Hospital, Balangir and Saradeswari Government Ayurvedic Hospital, Balangir
- Method of collection of patients: A pro forma was prepared which includes details of history taking, physical signs and symptoms, and subjective and objective parameters. With this pro forma, 30 patients were randomly scrutinized and selected for a clinical study.

2.1. Ethical Clearance

With due approval by the Institutional Ethical Committee (IEC), Government Ayurvedic College and Hospital, Balangir, the study has been conducted among the patients registered for the purpose. Written consent was obtained from each patient who participate in the study with prior proper information.



2.2. Study Design and Grouping

2.2.1. Methodology-(Single-blind study)

- Thirty patients were taken for the study and all patients were taken in a single group.
- All patients were given Santarpana Mantha
- Assessment was done in every 15 days .
- Duration – 60 Days

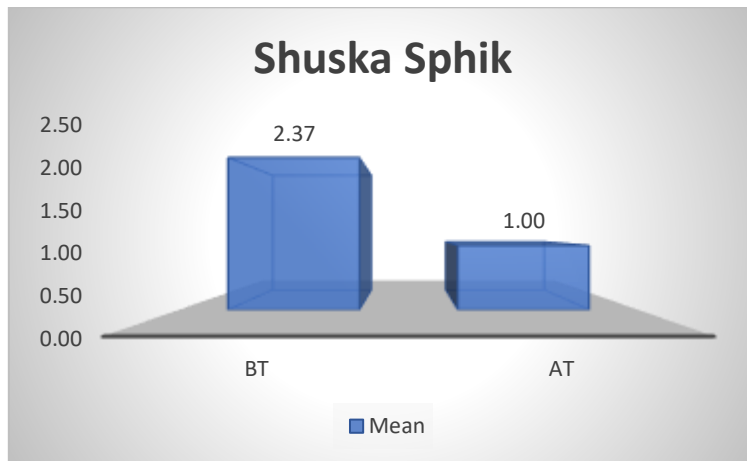
3. RESULT

The subjective & objective parameters were analysed in term of Mean Standard Deviation (SD) , t- value & p- value . As subjective & objective parameters were on gradation form , so here used Wilcoxon Singed Rank test to test efficacy in this single Group.

Table No – 26 : Showing the result of Santarpana Mantha on Shuska Sphik

Shuska Sphik	Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
BT	2.37	2.00	0.49	0.09	-4.964 ^b	0.00000069	57.75	Sig
AT	1.00	1.00	0.26	0.05				

Chart No – 17 : : Showing the result of Santarpana Mantha on Shuska Sphik



From table 26 and chart 17 , it has been observed that before treatment the mean score of Shuska Sphik was 2.37 which reduced to 1.00 with a 57.75 % mean percentage of improvement after treatment .

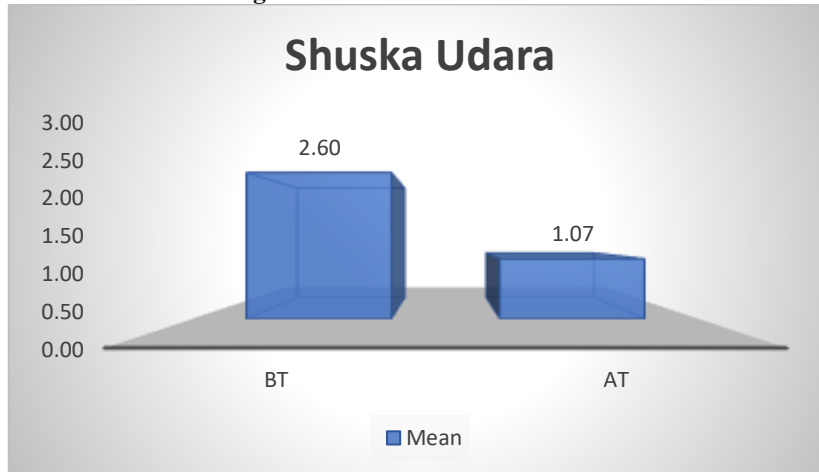
Since observations are on ordinal scale (gradations), we have used Wilcoxon Signed Rank Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Shuska Sphik is significant.

Table No – 27 : Showing the result of Santarmana Mantha on Shuska Uda

Shuska Udara	Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
BT	2.60	3.00	0.50	0.09	-4.932 ^b	0.00000081	58.97	Sig
AT	1.07	1.00	0.25	0.05				



Chart No – 18 : Showing the result of Santarmana Mantha on Shuska Udara



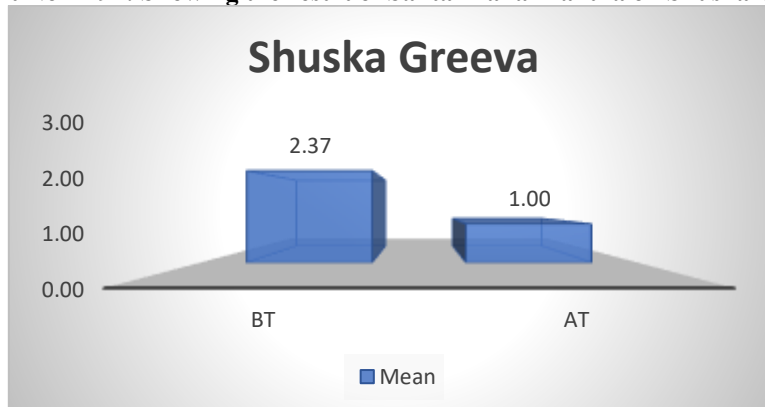
From table 27 and chart 18 , it has been observed that before treatment the mean score of Shuska Udara was 2.60 which reduced to 1.07 with a 58.97% mean percentage of improvement after treatment .

Since observations are on ordinal scale (gradations), we have used Wilcoxon Signed Rank Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Shuska Udara is significant.

Table No – 28 : Showing the result of Santarmana Mantha on Shuska Greeva

Shuska Greeva	Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
BT	2.37	2.00	0.49	0.09	-4.964 ^b	0.00000069	57.75	Sig
AT	1.00	1.00	0.26	0.05				

Chart No – 19 : Showing the result of Santarmana Mantha on Shuska Greeva



From table 28 and chart 19 , it has been observed that before treatment the mean score of Shuska Greeva was 2.37 which reduced to 1.00 with a 57.75% mean percentage of improvement after treatment .

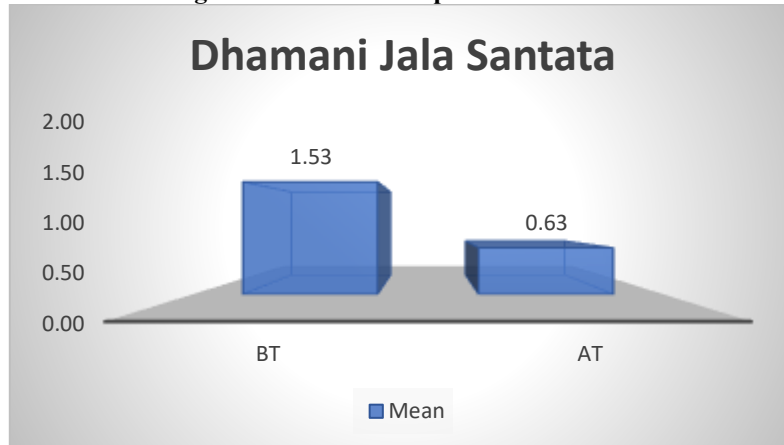
Since observations are on ordinal scale (gradations), we have used Wilcoxon Signed Rank Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Shuska Greeva is significant.

Table No – 29 : Showing the result of Santarpana Mantha on Dhamani Jala Santata

Dhamani Jala Santata	Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
BT	1.53	2.00	0.51	0.09	-4.838 ^b	0.00000131	58.70	Sig
AT	0.63	1.00	0.49	0.09				



Chart No – 20 : Showing the result of Santarpana Mantha on Dhamani Jala Santata



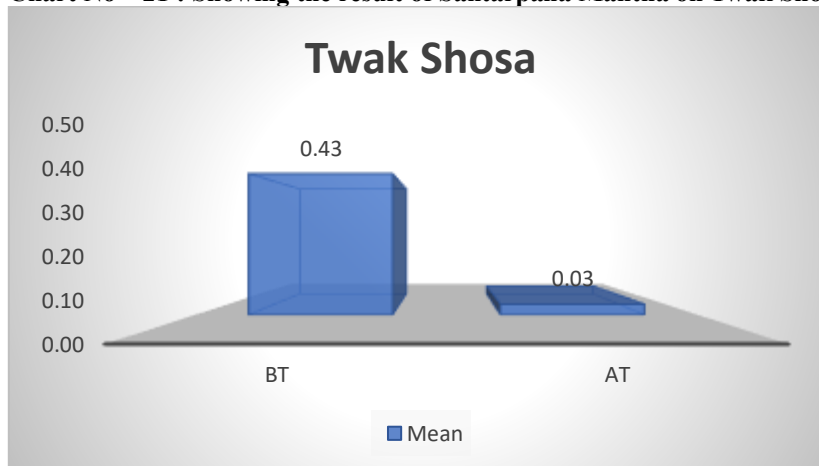
From table 29 and chart 20 , it has been observed that before treatment the mean score of Dhamani Jala Santata was 1.53 which reduced to 0.63 with a 58.70% mean percentage of improvement after treatment .

Since observations are on ordinal scale (gradations), we have used Wilcoxon Signed Rank Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Dhamani Jala Santata is significant.

Table No – 30 : Showing the result of Santarpana Mantha on Twak Shosa

Twak Shosa	Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
BT	0.43	0.00	0.50	0.09	-3.464 ^b	0.00053201	92.31	Sig
AT	0.03	0.00	0.18	0.03				

Chart No – 21 : Showing the result of Santarpana Mantha on Twak Shos



From table 30 and chart 21 , it has been observed that before treatment the mean score of Twak Shosa was 0.43 which reduced to 0.03 with a 92.31% mean percentage of improvement after treatment .

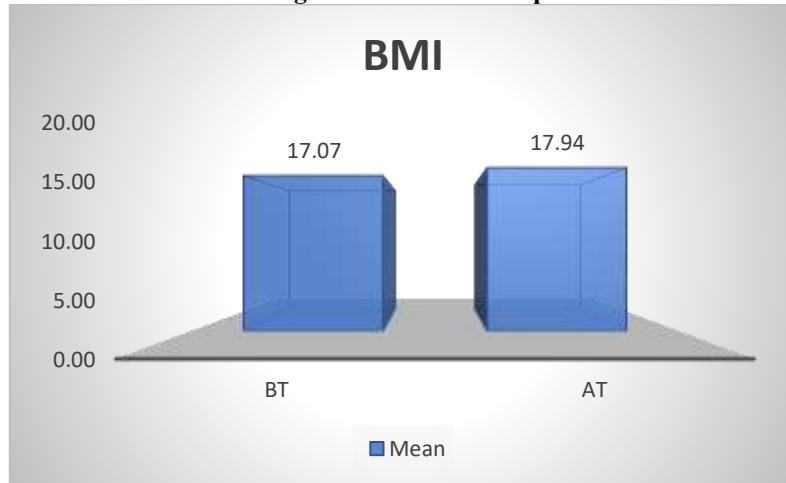
Since observations are on ordinal scale (gradations), we have used Wilcoxon Signed Rank Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Twak Shosa is significant.

Table No – 31 : Showing the result of Santarpana Mantha on BMI

BMI	Mean	N	SD	SE	t-Value	P-Value	% Change	Result
BT	17.07	30	1.78	0.32	-7.674	0.000	5.10	Sig
AT	17.94	30	1.38	0.25				



Chart No – 22 : Showing the result of Santarpana Mantha on BMI



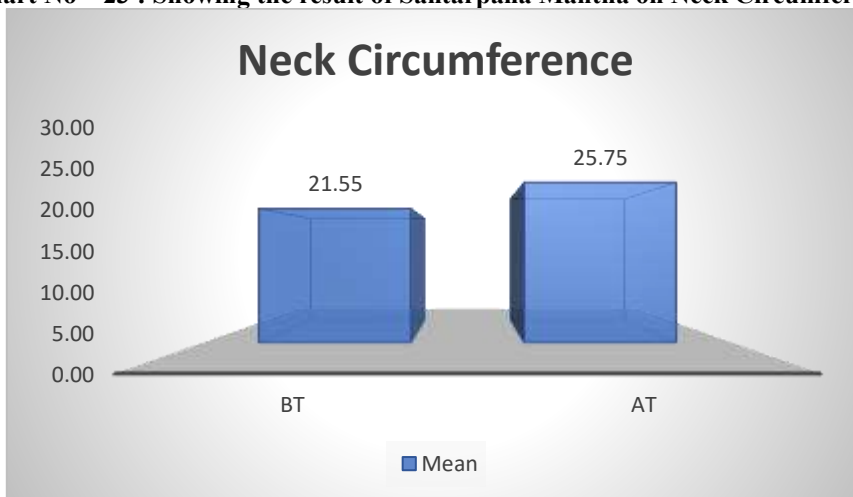
From table 31 and chart 22 , it has been observed that before treatment the mean score of BMI was 17.07 which increased to 17.94 with a 5.10% mean percentage of improvement after treatment .

Since observations are quantitative, we have used Paired t- Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in BMI is significant.

Table No – 32 : Showing the result of Santarpana Mantha on Neck Circumference

Neck Circumference	Mean	N	SD	SE	t-Value	P-Value	% Change	Result
BT	21.55	30	7.08	1.29	-5.966	0.000	19.47	Sig
AT	25.75	30	6.97	1.27				

Chart No – 23 : Showing the result of Santarpana Mantha on Neck Circumference



From table 32 and chart 23 , it has been observed that before treatment the mean score of Neck Circumference was 21.55 which increased to 25.75 with a 19.47% mean percentage of improvement after treatment .

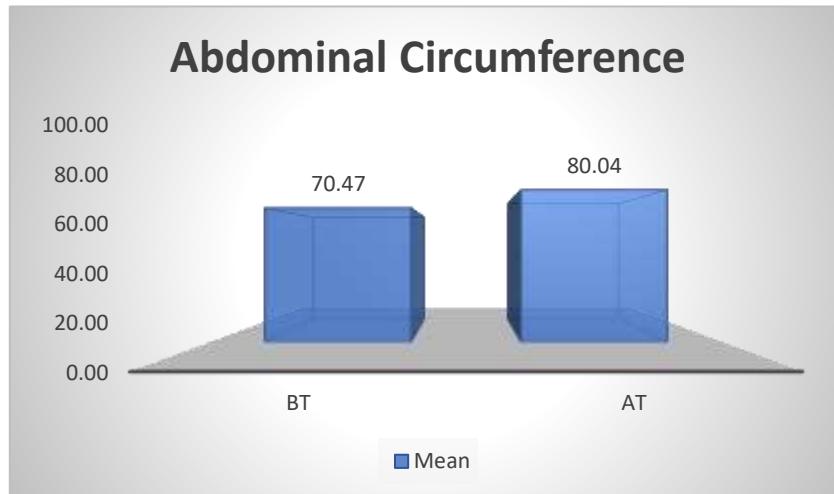
Since observations are quantitative, we have used Paired t- Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Neck Circumference is significant.

Table No – 33 : Showing the result of Santarpana Mantha on Abdominal Circumference

Abdominal Circumference	Mean	N	SD	SE	t-Value	P-Value	% Change	Result
BT	70.47	30	9.73	1.78	-12.739	0.000	13.59	Sig
AT	80.04	30	8.48	1.55				



Chart No – 24 : Showing the result of Santarpana Mantha on Abdominal Circumference



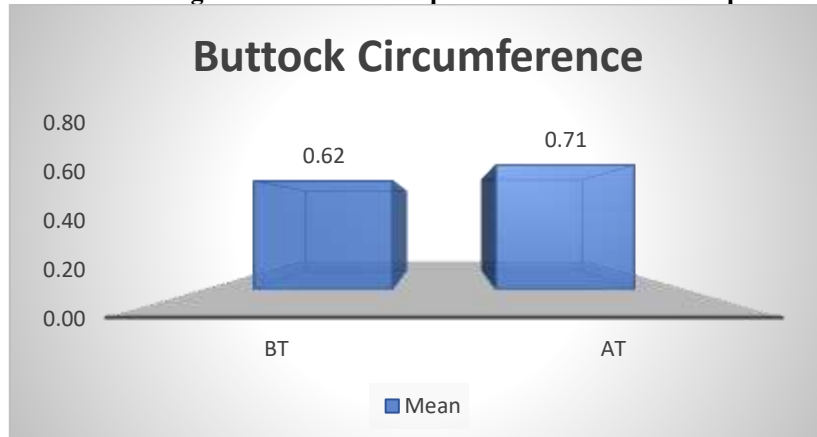
From table 33 and chart 24 , it has been observed that before treatment the mean score of Abdominal Circumference was 70.47 which increased to 80.04 with a 13.59 % mean percentage of improvement after treatment .

Since observations are quantitative, we have used Paired t- Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Abdominal Circumference is significant.

Table No – 34 : Showing the result of Santarpana Mantha on Waist-Hip Circumference

Waist-Hip Circumference	Mean	N	SD	SE	t-Value	P-Value	% Change	Result
BT	0.62	30	0.03	0.00	-12.110	0.000	14.56	Sig
AT	0.71	30	0.04	0.01				

Chart No – 25 : Showing the result of Santarpana Mantha on Waist-Hip Circumference



From table 34 and chart 25 , it has been observed that before treatment the mean score of Waist-Hip Circumference was 0.62 which increased to 0.71 with a 14.56 % mean percentage of improvement after treatment.

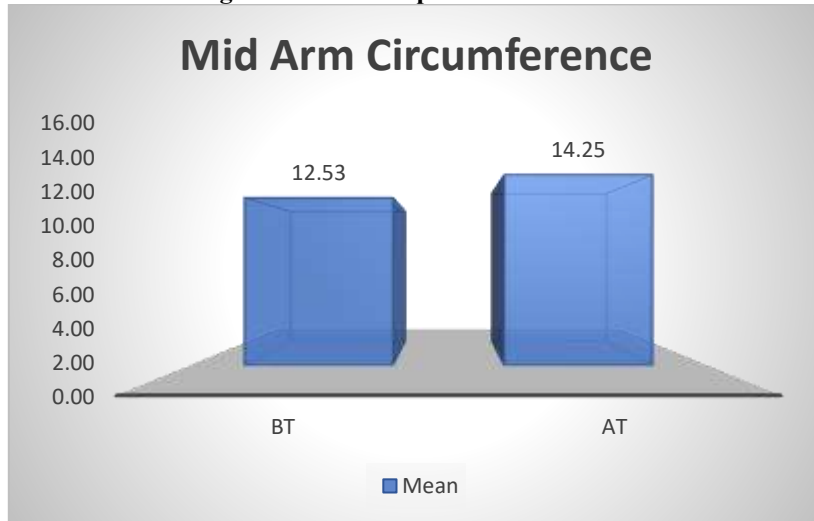
Since observations are quantitative, we have used Paired t- Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Waist-hip Circumference is significant.

Table No – 35 : Showing result of Santarpana Mantha on Midarm Circumference

Mid Arm Circumference	Mean	N	SD	SE	t-Value	P-Value	% Change	Result
BT	12.53	30	0.80	0.15	-5.106	0.000	13.75	Sig
AT	14.25	30	1.71	0.31				



Chart No – 26 : Showing result of Santarpana Mantha on Midarm Circumference



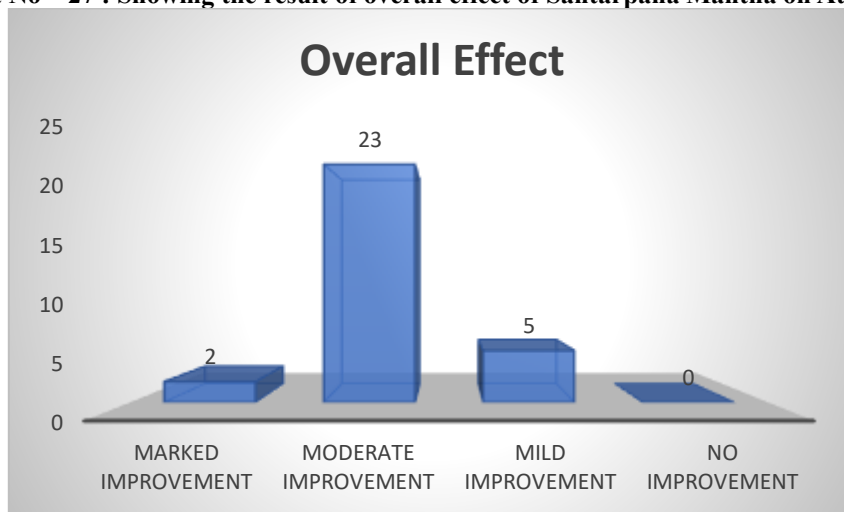
From table 35 and chart 26 , it has been observed that before treatment the mean score of Mid-Arm Circumference was 12.53 which increased to 14.25 with a 13.75 % mean percentage of improvement after treatment .

Since observations are quantitative, we have used Paired t- Test to test efficacy. From above table, we can observe that, P-Value is less than 0.05. Hence, we can conclude that, effect observed in Mid Arm Circumference is significant.

Table No – 36 : Showing the result of overall effect of Santarpana Mantha on Atikrasha

Overall Effect	Frequency	Percentage
Marked Improvement	2	6.67%
Moderate Improvement	23	76.67%
Mild Improvement	5	16.67%
No Improvement	0	0.00%
TOTAL	30	100.00%

Chart No – 27 : Showing the result of overall effect of Santarpana Mantha on Atikrasha



From table 36 and chart 27 , It has been observed that, as per the treatment, 6.67 % had got marked improvement, 76.67% had got moderate improvement,16.67% had got mild improvement.



4. DISCUSSION

Disease Review Dialogue

1. An apparently lean and thin looking person may be known as Krisha.
2. Karshya is an Apatarpana Janya Vyadhi.
3. Ahar Dosh is the main predisposing factor for this disorder and Alpashana and VishamaShana (false habit of intake) are specially results in the development of Karshya.
 - a. Karshya can be Swatantra Vyadhi, normal phenomenon or it can also manifest along with other diseases as an prestige symptoms of complication.
 - b. Though Krishata is found as a whole entity or a part of diseased condition. In the present study Krishata not complicated by any diseased condition or not resulted in any diseased condition has been taken in to consideration.
 - c. In Ayurveda no much description is found regarding Karshya especially in children. Detailed information about Karshyadhikar is given in Bhavaprakasha but Chikitsa of Karshya in children is explained by Yogaratnakar only.
 - d. As Krishata is a pre-stage it is to be treated with proper care and attention which other wise leads to either Balshosha, Parigarbhika or Atikarshya.
 - e. Karshya and Atikarshya are condition's which may occur at any time.
 - f. But Parigarbhika and Balshosha represents the early infancy malnutrition.
 - g. Malnutrition and Weight loss is a possible condition may be correlated with Karshya to some extent.
 - h. There are many other nutritional deficiency disorder in which weight loss may not occur so all the nutritional deficiency disorder may not be correlated with Karshya.

Drug Review Dialogue

- a. Pharmacotherapies like Brimhana Rasayana Vrisya have been advocated in the classics for the patients of Karshya. In Modern pediatrics diet management and restoration of the different deficiencies have been advised for protein energy malnutrition.
2. In case of management of Atikarshya Acharya Charaka rightly advised administration of Mridu Samshodhana as per the requirements.
3. Considering the above mentioned fact Brimhana therapy in the form of Santarpana Mantha has been administered in the patients of Karshya.
4. Brimhana refers to the phenomenon of healthy growth of Dhatus, particularly Kapha, Mamsa and Meda leading to proper development and enhancement of different body part.
 - i. Phenomenon of Brimhana can be understood in two stages viz by means of Aahar and Aushadha. Being Veerya Pradhana Brimhana Aushadha causes quicker results than that of Rasa Pradhan Brimhana Ahara.
 - j. Brimhana Dravya predominantly comprises of Parthiva and Apya Bhavas.
 - k. Apart from this during the treatment of Karshya one should be cautious that Brimhana Dravya's used in such instances should be Laghu Santarpana in nature because already in an emaciated person Sharirbala and Agnibala are reduced.
 - l. The ultimate aim of treating Karshya is to achieve proportionate body personality.
 - m. Probably mode of action of Brimhana Dravya's can be assessed on the ground of its Gunapanchaka. It is found that majority of ingredients have predominance of Guru, Snigdha, Shita and Manda Guna, Madhura Rasa and Madhura Vipaka causing Brimhana effect.
 - n. Mode of action of Santarpana Mantha - The individual component of this yoga has been clinically evaluated.

Probable Rasa, Virya, Vipaka in Brimhana dravya:

- ✓ **Rasa:** Rasa is the quality that is perceived by the organ of taste i.e. Jihva. As per the evidences given by different classical authours, Madhura, Amla and Lavana Rasa are claimed of having Brimhana property.
- ✓ **Virya:** Virya represents that aspect of drug and diet by virtue of which, they manifest their action on the body. It is observed that Brimhana Dravya possesses shita virya in general.
- ✓ **Vipaka:** The effects of Guna which emerge dominantly at the end of digestion are termed as Vipaka. Usually Brimhana Darvyas undergoes Madhura Vipaka because of the dominance of Madhura Rasa at the end of metabolic transformation.
- ✓ **Prabhava:** Prabhava is the unexplainable entity that supercedes all the above things and which is the ultimate decisive factor that directs the fate of the action of the particular drug.
- ✓ **Mode of action of Santarpana Mantha :** Santarpana Mantha having a property of Madhura Rasa and Madhura Vipaka which is Vata Shamaka. The Srotoshodhaka property of Yoga helps in clearance of channels and improves the circulation of Dhatus and indirectly helps in nourishment of Dhatus means responsible for Uttarottar Dhatu Poshana. Vatanulomaka property of yoga helps in balance and maintenance of Agni and ultimately causes Samyaka Aharpaka. Vrishya property helps in triglyceride synthesis which is Dehavridhikara Bhava. On the other hand Guru Shita Snigdha and Mridu Gunas



are directly responsible for Brimhana effect in body. Rasayana property improves general health and immunity. Jivaniya property maintains equilibrium of Dosha, Dhatu and Malas.

5. CONCLUSION

- Maharshi Charak advises the principle of treatment the Sthula(obese) and Krusha (emaciated) persons . it means Guru Apatarpana for Sthula person for Karshana therapy and Laghu Santarpana for Bruhana therapy for emaciated persons .
- Acc to Acharya Charak lean is less harmful than obese, and the physical and mental sufferings in the case of an obese person are far greater in comparison to a lean person
- Hence considering all these factors Maharshi Charak has narrated a formulation called as Santarpana Mantha for Atikrisha , which contains a combination of six ingredient , i.e Sarkara , Pippali , Taila , Ghrita ,Madhu and Sattu .Out of that, most of the drugs have nutritative action & Brushya in nature

6. ACKNOWLEDGEMENT

None

7. AUTHORS' CONTRIBUTION

All the authors contributed equally in design and execution of the article.

8. FUNDING

Nil

9. ETHICAL APPROVALS

Approval by the IEC , Government Ayurvedic College & Hospital , Balangir

10. CONFLICTS OF INTEREST

Nil

11 DATA AVAILABILITY

This is an original manuscript and all data are available for only research purposes from principal investigators.

12. PUBLISHER NOTE

This journal remains neutral with regard to jurisdictional claims in published institutional affiliation .

REFERENCES

1. Charak samhita of agnivesh , edited with the charak chandrika hindi commentary, by bramhananda tripathy ,published by chaukhamba surbharati prakashan , varanasi , reprint year 2020, sutra sthan 21/3 , page no – 398.
2. Charak samhita of agnivesha , edited with the charak chandrika hindi commentary , by bramhananda tripathy , published by chaukhamba surabharati prakashan , varanasi, reprint year 2020 , suta sthan 23/35 , page no – 426.
3. Charak samhita of agnivesha, edited with the charak chandrika hindi commentary, by bramhananda tripathy , published by chaukhamba surabharati prakashan , varanasi, reprint year 2020, sutra sthan 21/18,19 , page no – 403 .
4. Charak samhita of agnivesh , edited with the charak chandrika hindi commentary, by brmhananda tripathy, published by chaukhamba, varanasi, reprint year- 2020, sutra sthan 21/20 , page no - 404
5. Sharangadhar samhita , jivanprada hindi commentary , by dr .smt. Shailaja srivastava, published by chaukhamba , reprint year – 2017 , madhyam khanda 3/ 9,10 , page no – 164.
6. Nutrition and child development by K.E. Elizabeth (2004), third edition, divyesh A kothari for paras medical publisher, Hyderabad year 2004 page/152.
7. Charaka Samhita, Ayurveda dipika Ayushi Hindi commentary First part by Vd. Harisha Chandra kushawaha, Chaukhambha orientalia publisher Varanasi, First edition 2005, Sutra sthana – 22/320/10
8. Ashtanga Samgraha of Srimada Vagabhatta, edited with Saroj Hindi commentary by Dr. Ravi Dutta Tripathi, Chaukhambha Sanskrita Pratisthana Orientalia publishers Varanasi edition 1996 Sutra sthana Cha 24/434/4.
9. Ashtanga Hridaya of Vagabhatta edited with the Vidyotini Hindi commentary by Kaviraja atrideva Gupta Edited by Vaidya yadunandana Upadhyaya, Chaukhambha Sanskrita samsthana Varanasi, Charu printers Fourteenth edition 2003, Sutra sthana Cha. 14/100/2.
10. Sushruta Samhita of Sushruta with the Nibandhasamgraha commentary of Shri Dalhanacharya edited by Vaidya Jadavji Trikamji and by Narayanacharya Kavyatirtha, Chaukhamba krishnadas Academy Varanasi, Reprint year 2004, Sutra sthana Cha. 45/202/63.
11. Concept of Brimhana w.s.r. to Karshya, Namjoshi M 1994, Department of Basic Principle.
12. Quality standard of Indian Medicinal plants, Volume-2, page-204