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# A COMPARATIVE CLINICAL STUDY ON SHODHANANAGA SNEHAPANA WITH GO GHRITA AND VACHA- HARIDRADI GANA SIDDHA GHRITA PRIOR TO VIRECHANA KARMA IN STHAULYA

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### **ABSTRACT**

Introduction: In regards of *Sthaulya*, *Acharya Charaka* has enumerated it under *Asthauninditiya Adhyaya* in *Charaka Samhita Sutra Sthananam*, *Adhyaya* 21st. *Sthaulya* has been considered as one of the despicable conditions by *Acharya Charaka*. *Ayurveda* has identified Obesity as a Disorder very early. *Acharya Charaka* has enlisted Eight Types of Censurable Persons, out of which *Atikrisha* (Very Emaciated) and *Atisthula* (Very Corpulent) are more significant. *Ati Sthula* or Obese Person needs more attention because it is considered as *Kricchra Sadhya* and has more Complications than Very Emaciated Person. Treating *Sthaulya* or Obesity has its own limitations as there is No Specific Line of Treatment for Treating *Sthaulya*. Also,

Treating Obese Persons is difficult as they lack enthusiasm and zeal towards living a Healthy Lifestyle. Besides this, Obesity is also considered as a Lifestyle Disorder. Although many Therapies have been put forward for treating *Sthaulya*, there is a need for an Ultimate Line of Treatment for treating *Sthaulya*. Hence, this Study was carried out at Parul Institute of Ayurveda (PIA) - Limda - Vadodara (Gujarat), for finding a Therapeutic Intervention for *Sthaulya*. **Materials And Methods:** Total 30 Patients were undertaken for this Research Study. Both Male and Female Patients attending the OPD and IPD of Parul *Ayurved* Hospital, Khemdas *Ayurved* Hospital and Parul Sevashram Hospital were selected at Random without

bias of Social, Economic, Educational, or Religious Status. In Total, 33 Patients were enrolled for the Study wherein 3 Patients had Dropped Out. The Assessment of Treatment was 15 Days and Follow Up was done after 30 Days of *Virechana Karma*. **Results:** *Vacha-Haridradi Gana Siddha Ghrita* (Treatment Group) has achieved far better results in treating *Sthaulya* as compared to that of *Go Ghrita* (Control Group). E.g. – In one of the Subjects belonging to the Treatment Group (Group B – Treated with *Vacha-Haridradi Gana Siddha Ghrita*), BMI before the Treatment was 26.00, which reduced up till 24.20 after the Treatment. **Conclusion:** *Vacha-Haridradi Gana Siddha Ghrita* is more efficacious in Treating *Sthaulya* as compared to that of *Go Ghrita*. Also it was more effective in treating the Subjective as well as Objective Parameters like BMI, Body Circumference, and Skin Fold Thickness.

**KEY WORDS**: Vacha-Haridradi Gana Siddha Ghrita, Go Ghrita, Sthaulya, Asthauninditiya Adhyaya, Charaka Samhita, Sutrasthanam.

#### INTRODUCTION

Worldwide, at least 2.8 million people die each year as a result of being Overweight or Obese, and an estimated 35.8 million (2.3%) of Global DALYs [The Disability-adjusted Life Year (**DALY**) is a measure of overall Disease Burden, expressed as the Number of Years lost due to ill-health, disability or early death. It was developed in the 1990's as a way of comparing the overall health and Life Expectancy of different Countries] are caused by Overweight or Obesity. 'Overweight' and 'Obesity' leads to adverse Metabolic Effects on Blood Pressure, Cholesterol, Triglycerides and Insulin Resistance. Risks of Coronary Heart Disease, Ischemic Stroke and Type 2 Diabetes Mellitus increases steadily with increasing Body Mass Index (BMI), a Measure of Weight relative to Height.<sup>[1]</sup>

- **Obesity in India** has reached Epidemic Proportions in the 21st Century, with Morbid Obesity affecting 5% of the Country's Population.
- The impacts of **Obesity Stigma** on the individuals include Depression, Anxiety, Low Self-esteem, Body Image Concerns, Binge Eating, Avoidance of Physical Activity, Self-harm and even 'Suicide'.
- Ayurveda has identified Obesity as a Disorder very early. Acharya Charaka has enlisted Eight Types of Censurable Persons, out of which Atikrisha (Very Emaciated) and Atisthula (Very Corpulent) are more significant. Atisthula or Obese Person needs more attention because it is considered as KrichhraSadhya and has more Complications than Very

Emaciated person.

- 'Vacha-Haridradi Gana Siddha Ghrita' is being used for attaining Snehana and it is also being used as a part of 'Shodhananga Snehapana', which will enhance the Shodhana Karma and it, will also prove to be helpful in treating Kapha Medaja Conditions like Sthaulya (Obesity), owing to the Lekhanaiya and Medohara Properties of the drugs used in this Particular Gana. This will be followed by Virechana Karma, which will eliminate the Aggravated Doshas that have migrated from the Shakha to the Koshtha.
- So, 'Vacha-Haridradi Gana Siddha Ghrita' will Digest and Decimate the Overnourished Medadhatu and Sanchita Ama and will do Karshana. So, nowadays due to Fast Pace Life, there is always a need for an ultimate line of treatment of Obesity. It is the need that has made this Research Work to be done. This Research Work entitled "A Comparative Clinical Study on Shodhananga Snehapana with Go Ghrita and Vacha- Haridradi Gana Siddha Ghrita Prior to Virechana Karma in Sthaulya", is an effort to find a Therapeutic Intervention mentioned in Ayurveda Classics for the Obese People. Again for proving the Ayurveda's Great Attitude, the Study was carried out with the following 'Aims and Objectives':
- The Present Study is aimed to compare and access the results of *Shodhananga Snehapana* with '*Go Ghrita*' and '*Vacha-Haridradi Gana Siddha Ghrita*' prior to *Virechana Karma* in the Management of '*Sthaulya*' w.s.r to Obesity.

Keeping in view the above Concepts, the Research Work entitled, "A Comparative Clinical Study on *Shodhananga Snehapana* with *Go Ghrita* and *Vacha-Haridradi Gana Siddha Ghrita* Prior to *Virechana Karma in Sthaulya*" had been carried out at the Department of *Panchkarma*, located at the Parul Institute of *Ayurveda*, Parul University, Limda, Waghodia (Vadodara) – 391760.

## PATHOPHYSIOLOGY OF OBESITY<sup>[2]</sup>

'Obesity' is an exaggeration of Normal Adiposity and is a Central Player in the PathoPhysiology of Diabetes Mellitus, Insulin Resistance, Dyslipidemia, Hypertension, and Atherosclerosis, largely due to its secretion of 'Adipokines'. The 'Adipokines', or 'Adipocytokines' are 'Cytokines' secreted by 'Adipose Tissue'. The First Adipokine to be discovered was 'Leptin' in 1994. Since then, Hundreds of Adipokines have been discovered. Cytokines are nothing but the Cell Signaling Proteins. Obesity is a major contributor to the Metabolic Dysfunction involving Cardiac, Liver, Intestinal, Pulmonary, Endocrine, and

Reproductive Functions.

'Adipokines' are produced and secreted by Adipocytes. The Lipid Storing Cells, Adipocytes comprise the Adipose Tissue and are present in the Vascular and Stromal Compartments of the Body. Besides the generally accepted Role of Adipocytes for Fat Storage, these Cells also release Endocrine-Regulating Molecules. These Molecules include the following:

- 1) Energy Regulatory Hormone (Leptin)
- 2) Cytokines (TNF-a and interleukin-6)
- 3) Insulin Sensitivity Regulating Agents (Adiponectin, Resistin and RBP4)
- 4) Prothrombotic Factors (Plasminogen Activator Inhibitor)
- 5) Blood Pressure Regulating Hormone (Angiotensingen).

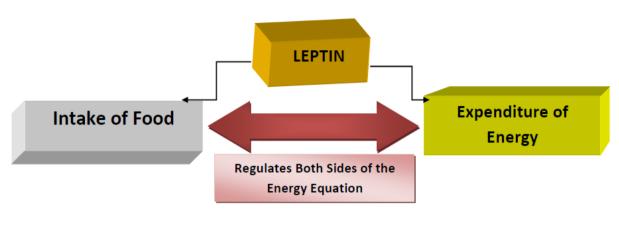
## PATHOMECHANISM OF OBESITY<sup>[2]</sup>

The Most Common 'Patho-mechanism of Obesity' involved is that the intake of Food or Energy Requirements exceeds the Energy Requirements or Consumption, and this "Energy" is then stored as a Fatty Tissue.

- 1) Primary increased intake of Energy/Food (Overeating), which the Organism is not able to utilize in spite of Normal Speed of Metabolic Processes.
- 2) Primary decrease of the Energy Consumption to the level of possible storage of Fatty Tissue in spite of Normal Food Intake. Lower Metabolic Rate Hypothyreosis.
- 3) Combination of both Mechanisms.
- □ VARIOUS CAUSES OF OBESITY<sup>[3]</sup>:- (Etiology or Etiological Factors Involved)
- ➤ The 'Etiology of Obesity' is Complex and incompletely understood.
- A. Excessive Food Intake
- B. Genetic Susceptibility
- C. Lack of Physical Activities
- D. In few cases, it can primarily be caused by Genes (Genetic Factors), Endocrine Disorders, Medications, Mental Disorders (Psychological Factors) and Environmental Factors.

However, simply put, Obesity is a Disorder of Energy Balance. The Two Sides of the 'Energy Equation' are finely regulated by Neural and Hormonal Mechanisms, so that Body Weight is maintained within Normal Range for many years. Apparently, this fine Balance is controlled by an internal set point, or 'Lipostat' that senses the Quantity of Energy Stores (Adipose Tissue) and approximately regulates Food Intake as well as Energy Expenditure. In

Recent Years, Several 'Obesity Genes' have been identified. As might be expected, they encode the Molecular Components of the Physiologic System that regulates Energy Balance. A Key Player in Energy Homeostasis is the LEP Gene and its product, 'Leptin'. This Unique Member of the 'Cytokine Family', secreted by 'Adipocytes', regulates both sides of the Energy Equation – Intake of Food and Expenditure of Energy.<sup>[3]</sup>



## **Energy Equation**

## **Pathogenesis**

Samprapti of any given disease gives us the Mode of Formation of the Disease, i.e., 'Pathogenesis'.

Due to the various Aharatmaka, Viharatmaka, Manasika, and Anya Nidana Sevana, increase in Kapha and Medodhatu occurs and Sthana Samshraya of these Beeja takes place in Medovaha Srotasa. This increase in Kapha and Medodhatu causes hampering of different levels of Agni in the Body, which results in Medodhatvagnimandhya. All these things together cause the Medovaha Srotodushti. Sroto Avarodha of different Srotasa is cause by increased Meda, which ultimately affects the Poshana of different Dhatus and it again leads to Medodhatu Vriddhi. Due to the less Poshana (Nutrition) of different Dhatus, Ashtadosha of Medoroga, i.e., Ayushohrasa, Kshudra Shwasa, Daurbalyata etc., is caused. Again the Srotosanga causes the Margavarodha of Vayu. This Avarodhita Vayu reaches to the Koshtha and causes Jatharagni Sandhukshana, which leads to Atikshudha and Vishamagni. Further it contributes in the aggravation of the Disease. [4]

I have become a Voracious Aharatmaka, Eater Medo Viharatmaka. Manasika and Anya Nidana Increase of Sthaulya Kapha and or Medo Obesity Dhatu Accumulation of **Meda** Leads to Dahtu in the Hampering of Different Levels Srotasa does of Agni in the Sroto Body which Avarodha leads to Medodhatvagni Jatharagni becomes *Pradipta* VAYU gets and the Food gets easily digested obstructed and the Patient craves for more JATHARAGNI

The following is the Diagrammatic Representation of *Sthaulya*:

The various Samprapti Ghatak's of the Disease Sthaulya are as mentioned below:

## SAMPRAPTI GHATAK<sup>[4]</sup>:

a. Dosha : Kapha – Kledaka Pitta – Pachaka

Vata – Samana, Vyana

**b.** *Dushya* : *Rasa* and *Meda Dhatu* 

c. Agni : Jatharagni Parthiva, Apya, Bhutagni Rasa and Meda

Dhatvagni

d. Srotasa : Medovaha, Mamsavaha, Swedavaha Srotasa

e. *Sroto Dushti* : *Sanga (Margavarodha –* Cha.Su.21/3-4)

f. Adhisthana : Sarvanga
g. Udhbhava Sthana : Amashaya
h. Prasara : Rasayani
i. Roga Marga : Bahya

**j.** Vyakti Sthana : Sarvanga especially Udara, Sphika, Stana and Gala Pradesha.

## CLINICAL CONSEQUENCES of OBESITY<sup>[3]</sup>: [COMPLICATIONS]

'Obesity' particularly 'Central Obesity' is a known Risk Factor for a number of conditions, including Type 2 Diabetes, Cardiovascular Disease, and Cancer. Central Obesity also stands

at the center of a cluster of alterations known as the 'Metabolic Syndrome', characterized by abnormalities of Glucose and Lipid Metabolism coupled with Hypertension and evidence of a Systemic Pro-inflammatory State. The Mechanisms underlying these associations are Complex and probably interrelated. The following Associations are Worthy of Note:

- ♣ 'Obesity' is associated with Insulin Resistance and Hyperinsulinaemia, important features of Type 2 Diabetes (formerly known as Non-insulin-dependent Diabetes). It has been speculated that Excess Insulin, in turn, may play a role in Retention of Sodium, Expansion of Blood Volume, Production of Excess Norepinephrine, and Smooth Muscle Proliferation that are the 'Hallmarks of Hypertension'. Whatever the Mechanism, the Risk of developing Hypertension among previously Normotensive Persons increases proportionally with Weight.
- ♣ 'Obese Persons' generally have Hypertriglyceridemia and Low HDL Cholesterol Levels, factors that increase the risk of Coronary Artery Disease.
- There is an increased incidence of 'Certain Cancers' in the Overweight, including Cancers of the Esophagus, Endometrium, Gall Bladder, and Kidney in Women. Overall, Obesity is associated with approximately 20% of Cancer Deaths in Women and 14% of Deaths in Men. The Underlying Mechanisms are Unknown and are likely to be Multiple. One Suspect is Hyperinsulinemia. Insulin increases levels of insulin-like growth factor-1 (IGF-1), which can stimulate the Growth and Survival of many types of Cancer Cells by activating its Cognate Receptor, IGF1R. The Association of Obesity and Endometrial Cancer may be indirect: High Estrogen Levels are associated with an increased risk of Endometrial Cancer, and Obesity is known to raise Estrogen Levels. With Breast Cancer, the data are Controversial.
- ♣ 'Nonalcoholic Steatohepatitis' is commonly associated with Obesity and Type 2 Diabetes. This condition also referred to as Nonalcoholic Fatty Liver Disease, can progress to Fibrosis and Cirrhosis.
- 4 'Cholelithiasis' (Gall Stones) is Six Times more common in Obese than in lean subjects. The Mechanism is mainly an increase in Total Body Cholesterol, increased Cholesterol turnover, and augmented Biliary Excretion of Cholesterol in the Bile, which in turn predisposes affected persons to the formation of Cholesterol-rich Gallstones.
- ⁴ 'Hypoventialtion Syndrome' is a Constellation of Respiratory Abnormalities in Very Obese Persons. It has been called "Pickwikian Syndrome", after the Fat Lad who was constantly falling asleep in Charles Dickens' *The Pickwikian Papers*. Hypersomnolence, both at Night and during Day, is characteristic and is often associated with Apneic Pauses

during Sleep, Polycythemia, and eventual Right-sided Heart Failure.

- ♣ 'Marked Adiposity' is a predisposing factor for the development of 'Degenerative Joint Disease' (Osteoarthritis). This form of Arthritis, which typically appears in older persons, is attributed in large part to the cumulative effects of wear and tear of joints. The greater the body burden of Fat, the greater the trauma to passage of joints with the passage of time.
- ♣ Markers of Inflammation, such as C-reactive Protein (CRP) and Pro-inflammatory Cytokines like TNF, are often elevated in Obese Persons. The basis for the inflammation is uncertain, both a direct pro-inflammatory effect of excess circulating Lipids and increased release of Cytokines from Fat-laden Adipocytes has been proposed. Whatever the Cause, it is thought that Chronic Inflammation may contribute to many of the Complications of Obesity, including Insulin Resistance, Metabolic Abnormalities, Thrombosis, Cardiovascular Disease, and Cancer.

## SADHYA-ASADHYATA<sup>[5]</sup> (Prognosis)

- Regarding 'Sthaulya', most of the Acharyas have described Bad Prognosis and 'Sahaja Sthaulya' is considered incurable.
- ♣ Acharya Charaka has also emphasized the fact that the treatment of 'Sthaulya' is more difficult than 'Karshya'.
- ♣ Practicing appropriate *Pathya*, *Apathya* along with the Treatment of Disease is one of the unique Characteristics of Ayurvedic Science. *Acharya Charaka* has defined that the Food Articles, Drugs and Regimen, which do not affect the Body and Mind adversely are regarded as 'Pathya' and in the same way, which adversely affects the Body, are considered as 'Apathya'.
- Regarding the *Pathya Ahara* of *Sthaulya*, it should be kept in mind that whenever *Ahara Kalpa* is to be given, it should be *Kapha Vatahara*.

## MATERIALS AND METHODS

Total 30 Patients were undertaken for this Research Study. Both Male and Female Patients attending the OPD and IPD of Parul *Ayurved* Hospital, Khemdas *Ayurved* Hospital and Parul Sevashram Hospital were selected at Random without bias of Social, Economic, Educational, or Religious Status. In Total, 33 Patients were enrolled for the Study wherein 3 Patients had Dropped Out. The Assessment of Treatment was 15 Days and Follow Up was done after 30 Days of *Virechana Karma*.

- 1) Group A (Control Group) Total 15 Patients were taken in this Group and these Patients were made to do *Snehapana* with *Go Ghrita* for 5 to 6 Days, after attaining proper *Deepana* and *Pachana* with *Hingwastaka Choorna* 5 gm (Two Times a Day for 3-5 Days, Before Food) and *Triphala Ghanavati* Two Tablets, Two Times a Day, for 3-5 Days, Before Food), till the achievement of *Nirama Lakshanas*. After achieving proper *Samyak Snigdha Lakshanas*, these Patients were made to undergo *Virechana Karma* with *Trivritt Avaleha*.
- 2) Group B (Treatment Group) Total 15 Patients were taken in this Group and these Patients were made to do *Snehapana* with *Vacha-Haridradi Gana Siddha Ghrita* for 5 to 6 Days, after attaining proper *Deepana* and *Pachana* with *Hingwastaka Choorna* 5 gm (Two Times a Day for 3-5 Days, Before Food) and *Triphala Ghanavati* Two Tablets, Two Times a Day, for 3-5 Days, Before Food), till the achievement of *Nirama Lakshanas*. After achieving proper *Samyak Snigdha Lakshanas*, these Patients were made to undergo *Virechana Karma* with *Trivritt Avaleha*.

#### SHODHANANGA SNEHAPANA AND IMPORTANCE OF SNEHANA KARMA

Shodhananga Snehapana with the above mentioned Go Ghrita and Vacha-Haridradi Gana Siddha Ghrita is to be given in Vardhamana Marta in Arohana Krama to all the Subjects.

Clear cut reference about Vardhamana Matra has been available in Vanga Sena Samhita written by Acharya Vanga Sena. It goes as —

प्रथम मात्रा of Sneha should be - ३ पल;

Later, 'उत्तरोत्तर १।२ पल' Matra should be increased upto ६ पल.

*Uttama Matra* should be consumed for 1 Day, *Madhyama Matra* for 3 Days and *Jadhnaya or Hina Matra* should be consumed for 7 Consecutive Days.

Hence,

जधन्य मात्रा - ३ कर्ष (१० gm)

मध्यम मात्रा - ३ पल (४० gm)

प्रवरमात्रा-६ पल (४० gm)

The Sneha which is given in Jeerna Anna Kala, when the Meal of Previous Night is

completely digested is called as *Shodhana Sneha*. *Snehana* employed as the *Poorvakarma* of *Shodhana* and given in more quantity is *Shodhana Snehana*. This is also known as *Shodhananga*, *Shodhanartha* or *Shodhana Poorva Snehana*.

To eliminate a disease, two types of treatment are advised in Ayurveda grossly i.e., *Shodhana* and *Shamana*. It is necessary to do *Snehana* and *Swedana* before *Shodhana* Therapy. *Shodhana* Therapy is intended for the Purification of the Body. Usually in the treatment regimen, *Shodhana* Therapies are major procedures or *Pradhana Karmas*. They are preceded by certain preparatory procedures or pre-operative procedures known as *Poorva Karma*. *Snehana* and *Swedana* are the preparatory procedures of *Shodhana* Therapy. The idea of *Snehana* and *Swedana* is to bring out the vitiated *Doshas* to a suitable state so that they can be expelled out easily. This stage is called as "*Utklishta Doshavastha*". After these *Purvakarma*, consequently the *Doshas* present in the *Shakhas* are brought to *Koshtha*; *Doshas* change to '*Prachala*' or '*Pravaahana*' or '*Utklesana Avastha*' due to which they could be removed easily. The *Doshas* are moistened with *Sneha*, and by *Swedana* they are liquefied and can be easily expelled out by *Shodhana*. So in *Shodhana* Therapy, *Snehana* acts only as preparatory procedure. If *Shodhana* is done without *Snehana Swedana*, then body will break like a Dry Wood. *Shodhana* without proper *Poorvakarma* leads to severe exhaustion and weakness to the Body which in turn leads to *Vata Prakopa*. <sup>[6]</sup>

In this present Research study, Ghrita (Pure Cow's Ghee) has been used. Ghrita (Ghee) possesses 'संस्कारस्य अनुवर्नार् ्' Property, that is, without losing its own properties, it will adopt the Properties of the Drugs with which it gets processed. Ghrita is one among the Jangama Sneha and it is considered as one of the Best amongst all the Snehas, because of its 'संस्कारस्य अनुवर्नार् ्' Property. [6]

## **RESULTS**

*Vacha-Haridradi Gana Siddha Ghrita* (Treatment Group) has achieved far better results in treating *Sthaulya* as compared to that of *Go Ghrita* (Control Group).

E.g. – In one of the Subjects belonging to the Treatment Group (Group B – Treated with *Vacha- Haridradi Gana Siddha Ghrita*), BMI before the Treatment was 26.00, which reduced up till 24.20 after the Treatment. Also it was more effective in treating the Subjective as well as Objective Parameters like BMI, Body Circumference, and Skin Fold Thickness.

Also, effective results were obtained after the Treatment in Patients who had 'High Cholesterol Levels'.

## Like for Example -

- 1) A Patient belonging to the Treatment Group (Group B), who had been administered *Snehapana* with *Vacha-Haridradi Gana Siddha Ghrita* had Cholesterol Levels before Treatment in the Range of 215 mg/dl, which got reduced to 134 mg/dl after the Treatment.
- 2) Another Patient, who underwent *Snehapana* with *Vacha-Haridradi Gana Siddha Ghrita*, had his Cholesterol Levels in the Range of 218 mg/dl, which got reduced to 179 mg/dl after the Treatment.
- 3) Tremendous Results in the reduction of Levels of LDL (Low Density Lipoproteins) were also found after the Treatment in the Treatment Group (Group B Treated with *Vacha-Haridradi Gana Siddha Ghrita*). For Example, in one of the Patients belonging to the Treatment Group, who was administered *Snehapana* with *Vacha-Haridradi Gana Siddha Ghrita*, had LDL before Treatment 151.3 mg/dl which got reduced to 94 mg/dl after the Treatment.

#### **CONCLUSION**

- 1) Vatanulomana and Mala Anulomana occurred better in the Patients of Group B (Vacha-Haridradi Gana Siddha Ghrita) as compared to that of Go Ghrita.
- 2) Purisha Asamhati and Purisha Snigdha also occurred better in Group B as compared to that of Group A.
- 3) Gatra Mardavata and Gatra Snigdhata Lakshanas were found more in Patients of Group B as compared to that of Group A Patients on the last 2 Days of Snehapana.
- 4) In all the Objective Parameters like BMI, Weight, Body Circumference and Skin Fold Thickness, Patients of Group B in whom *Vacha-Haridradi Gana Siddha Ghrita* was administered had effective Results after the Treatment as compared to that of Group A Patients.
- 5) Also, in all the Subjective Parameters that have been mentioned in our Classics like *Ati Kshudha, Udara Chalatva, Nidra Adhikya, Sweda Adhikya* and *Daurgandhya*; In all these above mentioned Subjective Parameters, Significant Results were obtained Post Therapy in Group B Patients, in whom *Snehapana* was carried out with *Vacha- Haridradi Gana Siddha Ghrita*.
- 6) Results suggested that there was No Significant Difference in the Subjective Parameters

like Sphika Chalatva, Stana Chalatva, Kshudra Shwasa, Krathana and Ayase Akshamata, Post Treatment in Group A as well as in Group B.

- 7) The rest of the Subjective Parameters like *Alasya*, *Tandra*, *Anutsaha* (Lack of Enthusiasm), *Daurbalyata*, *Angamarda*, *Gurugatrata* etc. were reduced effectively Post Treatment in the Subjects of Group B, in whom *Vacha-Haridradi Gana Siddha Ghrita* had been administered.
- 8) Vacha-Haridradi Gana Siddha Ghrita proved to be more efficacious in the Management of Sthaulya, owing to the Lekhaniya and Medohara Properties of the Drugs which were used in the making of this Ghrita.
- 9) Also, *Snehodvega* was found more in the Patients of Group B as compared to that of Group A Patients.
- 10) Last but not the least, Results also suggested Significant Results in some of the Biochemical Investigations like Serum Cholesterol Levels and Low Density Lipoproteins, in the Patients who had been administered *Vacha-Haridradi Gana Siddha Ghrita*.
- 11) Snehapana with Go Ghrita was moderately effective in achieving the Snehana Karma but it was least effective in the Management of Sthaulya. In Comparison to that of Go Ghrita, Vacha-Haridradi Gana Siddha Ghrita did Snehapana effectively and rapidly and also proved to be more competent and efficacious in the Management of Sthaulya.

Hence, Vacha-Haridradi Gana Siddha Ghrita is more effective as Shodhananga Snehapana prior to Virechana Karma in Sthaulya.

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