



Ayurvedic Management of *Santarpana Janya Vikara* (Metabolic Syndrome).

AUTHOR :- DR. BHAGYASHREE VALVI

3rd Year Post Graduate Scholar, Kayachikitsa Department, Government Akhandanand Ayurved College & Hospital Ahmedabad

CO- AUTHOR:- DR. SNEHAL A. BARIA, DR. RAVINA MORE

3rd Year Post Graduate Scholar, Kayachikitsa Department, Government Akhandanand Ayurved College & Hospital Ahmedabad

CO- AUTHOR: PROF. DR. SURENDRA A. SONI

HOD, Department of Kayachikitsa, Government Akhandanand Ayurved College & Hospital Ahmedabad

Abstract:-

Metabolic syndrome is a rapidly emerging disease related to sedentary lifestyle and faulty dietary habits. The major features of metabolic syndrome include central obesity, raised triglycerides, low levels of High-density lipoprotein (HDL), hyperglycemia and hypertension. These abnormalities confer an increased risk of cardiovascular diseases and diabetes mellitus. In *Ayurveda*, metabolic syndrome may be correlated with the conditions like, *Medoroga*, *Santarpanajanya Vyadhi* including *Santapanajanya Madhumeha*, *Ati sthaulya*. All these conditions are interrelated and have similar pathological pathway. *Ayurvedic* approach to the management of metabolic syndrome hence is largely in the direction of the treatment of *Medoroga*. It includes the principles like *Nidana parivarjana Ahara*, *Vihara* and *Chikitsa* including the procedures like *Virechana karma*, oral administration of herbal products. In this case study 47 year old male patient history of diabetes mellitus, Dyslipidemia since 3 months. He came for *Ayurvedic* treatment in Govt. Akhandananda ayurveda college and hospital, Ahmedabad. Patient was treated on the principle of treatment mentioned for *Santarpanajanya Vyadhi Shodhana karma (Virechana)*, *Shamana Aushadhi* having *Deepana*, *Pachana*, *Meda-kleda Upshoshana*, *Lekhana* Properties.

KEYWORDS :- Metabolic Syndrome, *Santarpanajanya Vyadi*, *Pramhea*, *Medoroga*, *Virechana karma*, *Shamana Aushadhi*

INTRODUCTION:

Lifestyle diseases occur primarily based on people's daily habits and result from an inappropriate relationship between people and their environment. The onset of these lifestyle diseases is gradual; they take years to develop and, once diagnosed, are difficult to treat. The most common lifestyle diseases include hypertension, diabetes, arthritis, obesity, insomnia etc. Metabolic Syndrome is a lifestyle disorder that has become a major public-health Challenges around the world, owing to rising obesity and sedentary lifestyles. Abdominal obesity, insulin resistance,

hypertension and hyperlipideamia were the common pathological condition involved in Metabolic syndromes. Metabolic syndrome states to a constellation of several interrelated risk factor that promote the development of atherosclerotic, cardiovascular disease (CVD) and Type 2 diabetes mellitus. Metabolic Syndrome is a disease of modern era occurs due to life style changes like modernization, decreased level of physical activities and increased intake of calories. In *Charaka Samhita*, Lack of physical activity and unhealthy eating habits which are the causing of lifestyle disorders are mentioned in *Santarpanajanyam adhyayam*. Aetiology and Symptomatology of *Santarpanajanya Vikaras* shows a remarkable similarity with Metabolic syndrome since it includes sedentary lifestyle and dietary factors. Excessive consumption of *Madhura, Amla, Lavana, Guru, Snigdha, Nava annapanas, Gramya oudaka anupa mamasa rasa, Payas, Guda ikshu vikrtis* are the *Aharaja nidanas* mentioned in *Prameha, Atisthoulya* and *Santharpanajanya vikaras*. *Viharaja nidanas* include *Asyasukha, Nidra, Avyayama, Divaswapna, Avyavaya, Achintana* is mentioned in the *Nidanas* of *Sthoulya, Prameha* and *Santarpanotha vikaras*. *Harshnityatvata* is specifically stated among *Sthoulya nidanas*. *Acharya Charaka* mentioned *Vamana karma* and *Virechana karma* in the management of *Santarpanajanya Vyadhi*. If the patient does not have sufficient *bala* to undergo *Shodhana* therapy or when *Dosha* are Moderately vitiated *Shamana aushadhi* adopted in Metabolic Syndrome. *Shamana aushadhi* having *Deepana, Pachana, Lekhana, Medakleda Upashoshana, Tridoshashamana, Ushna virya* will the more appropriate which helps in alleviating *Agni vaishamya*, Removing *Srotoavrodha* and *Kapha-Medo Dushti*.

Case report

A male patient age 47 years old, k/c/o Diabetes mellitus type -2 and Dyslipidemia came to *Kayachikitsa* OPD Government Akhandananda Ayurveda Hospital, Ahmedabad with the Complaints of *Sharirabharahani, Daurbalya, Trishnaadhikya, Kshudhaadhikya, Ayasa adhika Adhika mutra pravrutti* since last 3 Months with Intermittent occasional *Udar Gauravta, Uraha Daha, Shirah Shola* since last 10 days.

He was relatively healthy before 3 months. Then his gradually decreased body weight since 3 months. In the last 3 months the patient's weight Increased from 78 kg to 92 kg and noticed symptoms like Excessive Urination, Weakness, Excessive thirst, Excessive hunger. So he consulted family physician. Patient did his recent investigation on 22/5/2023 and came to OPD for Ayurvedic Treatment of raised Blood Sugar Level, raised lipid level.

Personal history revealed the patient is vegetarian and used to take Milk, Sweet items, Curd diet frequently and he is irregular in taking his meals because of his field work.

He had no relevant family history or Past history.

Astavidh pariksha:

Nadi	72/min
Mala	2 times/day
Mutra	8-9 times/day
Jihva	Prakruta
Sabda	Prakruta

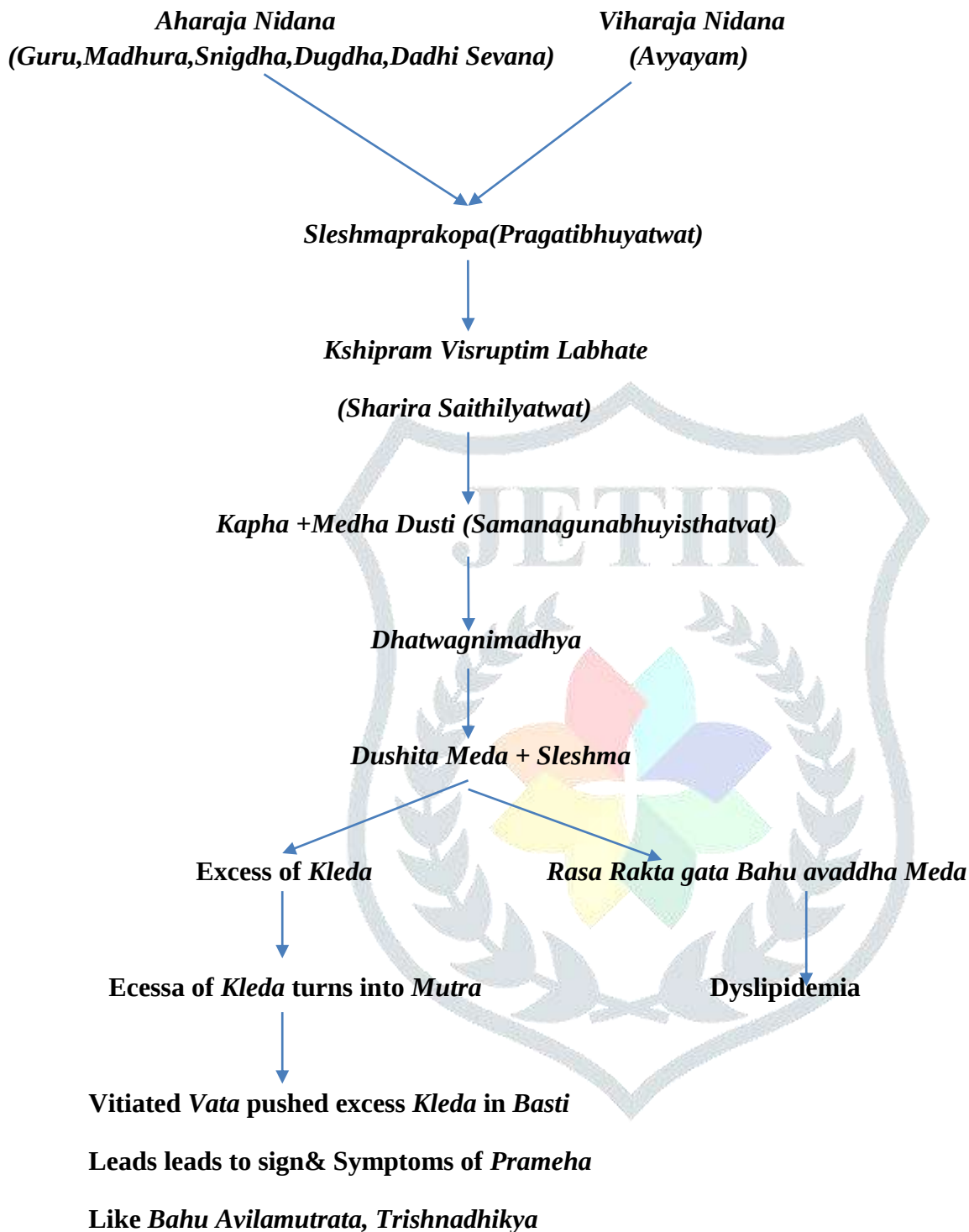
Sapsha	Prakruta
Akruti	Sthoola

General Examination

Blood pressure	140/98 mmHg
Pulse	70/min
Weight	92 kg

Samprapti Ghataka-

Dosha	Tridosha - Vata (vyana,apana),Pitta,Kapha Main- Kapha (Bahudrava shleshma)
Dushya	Rasa,Meda,Mamsa,Kleda,Shukra,Rakta,Vasa,Majja,Lasika,Oja,Ambu,Sweda Main- Meda,Mamsa,Kleda
Srotas	Mutravaha,Medovaha,Udakavaha,Swedavaha,Mamsavaha
Srotodushti	Atipravriti,Sanga,Vimarga gamana
Agni	Dhatvagnimandhya
Udabhvasthana	Amashaya
Vyaktasthana	Mutravaha Srotasa,
Adhisthana	Basti, Sharira
Marga	Madhyama Marga
Shadhya-ashadhyata	Chirakari, Anushangi

Samprapti

Treatment plan-**Internal medicine -**

Name of medicine	Dose	Duration	Anupana	Time of administration
<i>Arogyavardhini Vati</i>	2/2/2	90 days	<i>Sukhoshna Jala</i>	After meal
<i>Sudarshan Ghanvati</i>	2/2/2	90 days	<i>Sukhoshna Jala</i>	After meal
<i>Mamejava Ghanvati</i>	2/2/2	90 days	<i>Sukhoshna Jala</i>	After meal
<i>Shankh Vati</i>	2/2/2	90 days	<i>SukhoshnaJjala</i>	After meal
<i>Chandraprabha Vati</i>	2/2/2	90 days	<i>Sukhoshna Jala</i>	After meal
<i>Manjishthadi Kwath</i>	10 gm	90 days		Empty stomach
<i>Pathyadi Kwatha</i>	10 gm			
<i>Khadira Churna</i>	5 gm			
<i>Dhatrinisha Churna-</i>	5 gm			
<i>Vijayasara Churna</i>	5gm /2time/day			

Virechana plan-

	Drug name	Dose	Duration	Anupana
<i>Snehapana Arohi krama</i>	<i>Triphala Taila</i>	50 ml to 250 ml	5 days	Luke warm water
<i>Sarvanga Abhayanga</i>	<i>Nirgundi Taila</i>	-	3 days	
<i>Sarvanga Nadi Swedana</i>	<i>Dashmoola Kwath</i>	-	3 days	
<i>Virechana Dravya</i>	<i>Triphala Kwatha</i>	50 ml	1 days	
	<i>Panchasakar Churna</i>	20 gm		
	<i>Abhayadi Tablet</i>	4 Tablet		
	Castor oil	50 ml		<i>Shitambu</i>
<i>Sansajana Krama</i>	<i>Peyadi Krama</i>		5 days	

After Virechana treatment:-**Internal medicine**

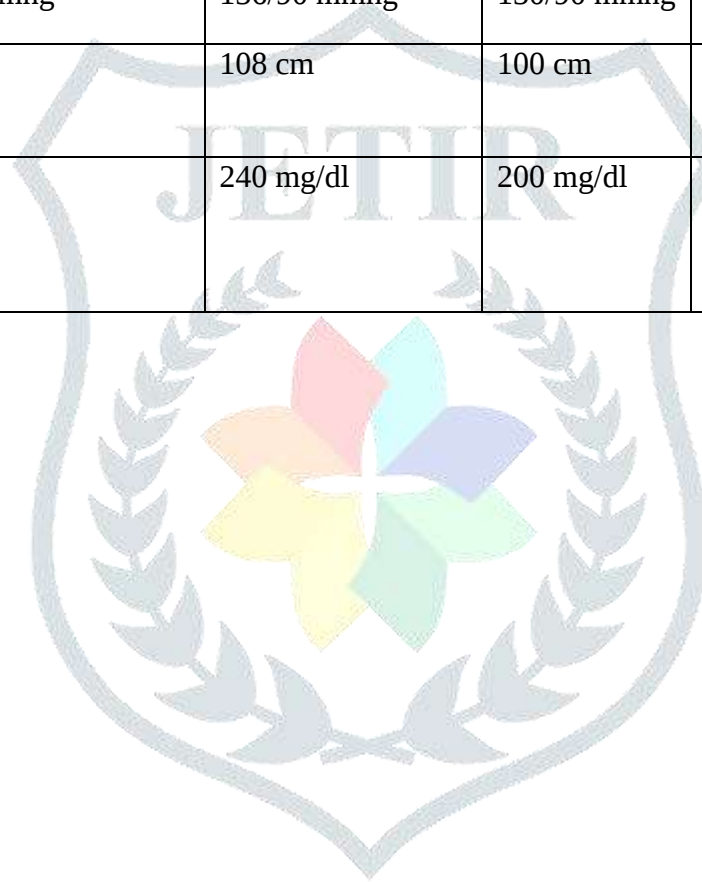
Medicine name	Dose	Duration	Time of administration	Anupana
<i>Mamejava Ghanvati</i>	2/2/2	1 month	After meal	Luke warm water
<i>Sudarshan Ghanvati</i>	2/2/2	1 month	After meal	Luke warm water
<i>Arogyavardhini Vati</i>	4/0/4	1 month	After meal	Luke warm water
<i>Sutshekhar Rasa</i>	2/0/2	1 month	After meal	Luke warm water
<i>Chitrakadi Vati</i>	2/0/2	1 month	After meal	Luke warm water
<i>Manjishthadi Kwath</i>	10 gm	1 month	Empty stomach	-
<i>Pathyadi Kwatha</i>	10 gm			
<i>Khadira Churna</i>	5 gm			
<i>Dhatrinisha Churna</i>	5 gm			
<i>Vijayasara Churna</i>	5 gm			
	/2times /day			
<i>Triphala Ghruta (Samana Matra)</i>	10 ml	1 month	Empty Stomach (Pratah kala)	Luke warm water

Result:-

	Before treatment	After treatment
<i>Trishnaadhikya</i>	++++	-
<i>Kshudhaadhikya</i>	++++	+
<i>Aayas adhika</i>	++++	-
<i>Uadar gauravta</i>	+++	-
<i>Uraha daha</i>	+++	-
<i>Daurbalyanubhuti</i>	+++	-

SHREE MUKTAJIVAN PATHOLOGY LABORATORY			
Patient's Name	: Chintahal Bhanwad	Age/Sex	: 45Y/Male
Ref. by	: Dr. Biren N. Shah (B.H.M.S.)	Collection On	: 22-05-2023 11:30
Reg. Date/Time	: 22-05-2023 11:30 #	Date/Time	
Sample From	: Nursing Visit	Registration No.	: 2301006115
		Patient ID	: ELEV1473025
GLYCOSYLATED HEMOGLOBIN, SEBIA, MINICAP			
TEST	RESULT	UNIT	BIOLOGICAL REF. INTERVAL
HbA1c	52.8	%	Non-diabetic: Less than 5.7 Pre-diabetic: 5.7-6.4 Diabetic: More than 6.5 Target for therapy: <7
eAG (Estimated Average Glucose)			
MEAN GLUCOSE	207.7	mg/dL	

	Before treatment (22/5/2023)	During treatment (30 /6/2023)	During treatment (5/9/2023)	After treatment (5/10/2023)
Weight	92 kg	80 kg	82 kg	79 kg
FBS	180 mg/dl	176 mg/dl	170 mg/dl	118mg/dl
PPBS	250 mg/dl	200 mg/dl	180 mg/dl	140 mg/dl
Hba1c	12.0 %	9.80%	7.60 %	6.90 %
S.Cholesterol	222.63 mg/dl	180.0 mg/dl	200 .0 mg/dl	170 mg/dl
Hypertension	140/98 mmhg	136/90 mmhg	130/90 mmhg	120/80mmhg
Waist Circumference	110 cm	108 cm	100 cm	96 cm
Tryglyceride	690.54 mg/dl	240 mg/dl	200 mg/dl	160.5 mg/dl



SHREE MUKTAJIVAN PATHOLOGY LABORATORY

Barcode: [QR Code]

Patient's Name: Chinubhai Bharwad Age/Sex: 45Y/Male
 Ref. by: Dr. Biren N. Shah (B.H.M.S.) Collection On: 22-05-2023 11:30
 Date/Time
 Reg. Date/Time: 22-05-2023 11:30 # Registration No.: 2301006115
 Sample From: Nursing Visit Patient ID: ELEV1473025

GLYCOSYLATED HEMOGLOBIN, SEBIA, MINICAP

TEST	RESULT	UNIT	BIOLOGICAL REF. INTERVAL
HbA1c	12.8	%	Non-diabetic: Less than 5.7 Pre Diabetic: 5.7 to 6.4 Diabetic: More than 6.5 Target for therapy: <7
Estimated Average Glucose (eAG)	287.7	mg/dL	

HbA1c measurement is based on Turbidimetric inhibition immunoassay

SCIENTIFIC DIAGNOSTIC CENTRE

Barcode: [QR Code]

TEST REPORT Reg. No.: 11023283071

Name: CHINUBHAI BHARWAD Reg. On: 05-Oct-2023 01:37 PM
 Age/Sex: 4 Years / Male Passport No.: Collected On: 05-Oct-2023 01:37 PM
 Ref. By: Approved On: 05-Oct-2023 02:37 PM
 Client Name: SHREEJ LAB, VADVA 907477000 Generated On: 05-Oct-2023 02:43 PM
 Sample Type: Whole Blood EDTA Ref ID:
 Status: Final

Parameter	Result	Unit	Biological Ref. Interval
HEMOGLOBIN A1C ESTIMATION			
HbA1C	6.90	% of Total Hb	< 5.7% - NON DIABETIC 5.7-6.4% - PRE DIABETIC > 6.5% - DIABETES 7.0% - ADA TARGET FOR DIABETIC PATIENT
Estimated Average Glucose (eAG)*	191.33	mg/dL	REF: ADA GUIDELINES 2018

HbA1c value is a more accurate index of long term diabetic control for preceding 1-3 months of doing the tests.
 HbA1c is a better indicator of long term glycemic control than blood glucose determination as blood glucose levels fluctuate on daily basis.
 We Perform HbA1c using gold standard HPLC technology free from interference from ESR, haemoglobin variants, temperature fluctuations, pH and sample degradation.

End of Report

SHREE MUKTAJIVAN PATHOLOGY LABORATORY

Barcode: [QR Code]

Patient's Name: Chinubhai Bharwad Age/Sex: 45Y/Male
 Ref. by: Dr. Biren N. Shah (B.H.M.S.) Collection On: 22-05-2023
 Date/Time
 Reg. Date/Time: 22-05-2023 11:30 # Registration No.: 2301006115
 Sample From: Nursing Visit Patient ID: ELEV1473025

LIPID PROFILE

TEST	RESULT	UNITS	BIOLOGICAL REF. INTERVAL
Serum Cholesterol	222.62	mg/dL	Less Than 200
Serum Triglycerides	886.94	mg/dL	Up to 150
Serum HDL Cholesterol	28.34	mg/dL	40 to 60
LDL Cholesterol Calculated*	48.182	mg/dL	85 to 100
Serum VLDL*	538.19	mg/dL	2 to 40
Chol/HDL Cholesterol Ratio	3.88		Up to 5.0
LDL/HDL Ratio	1.00		Up to 3.5

End of Report

SHREEJI PATHOLOGY LABORATORY (COMPUTERISED DIAGNOSTIC CENTRE)

Rahul Patel (B.Sc., M.L.T.) Ashok Patel (B.Sc., M.L.T.)

1, Dhana Apartment, Near Matruce Hospital, Uchhi Sheri, Vadva Gad, Ahmedabad-382440.
 Time: 9:30 a.m. to 8:30 p.m. • E-mail: shreejilab.vadva@gmail.com • Sunday: 9:00 a.m. to 1:00 p.m.

Patient Name: CHINUBHAI BHARWAD Reference: DR. SELP ID: 1513889
 Age & Sex: Reg. Date: 05/03/2024

LIPID PROFILE

Test	Observed Value	Biological Reference Interval
Fasting Blood Serum		
Cholesterol	170.8 mg/dL	< 200 : Desirable 200-239 : Borderline High ≥ 240 : High
Triglyceride	886.94 mg/dL	< 150 : Normal 150 - 199 : Borderline High 200 - 499 : High ≥ 500 : Very High
HDL Cholesterol	46 mg/dL	< 35 : Low (High Risk) ≥ 60 : High (Low Risk)
VLDL	52 mg/dL	0 - 30
LDL Cholesterol	92.0 mg/dL	< 100 : Optimal 100 - 129 : Near/Above Optimal 130 - 159 : Borderline High 160 - 199 : High ≥ 200 : Very High
LDL Chol. / HDL Chol. Ratio	2.0	1.0 - 2.4
Cholesterol / HDL Chol. Ratio	3.7	0 - 3.5

Discussion:

As per *Ayurvedic* Parlance, metabolic syndrome is the outcome of over nutrition due to *Dhatwagni Mandhya*. Obesity and lipid disorders compared with *Ayurveda* with context of *Prameha* and *Medoroga*.

Treatment of *Santarpanjaniya vyadhi* According to *Acharya Charaka Satmyachesta sevyā*, *Panchakarma*, e.g. *Vamana*, *Virechana*, and *Raktamokshana*, *Udvartana*, *Ruksha*, *Guru*, *Atarpana ahara sevan* e.g. *Vyayama vihara sevan* etc are beneficial in preventing and treating the *Santarpanajanya Vyadhi*. *Shodhana* and *Lekhana karma* which are helping in elimination of excess *Kapha* and *Meda* and also be helpful in management of *Medovaha dusti Vikara*.

- *Arogyavardhini Vati* mainly ingredient *katuki* which acts as *Bhedana karma* one type of *Virechana karma* and acts on *Yakruta*, improve metabolic system, Supports metabolism and weight management, protecting against metabolic syndrome disorders such as Obesity, Cholesterol, Diabetes and Heart disease.
- *Sudarshana Ghanvati* mainly ingredient *Kirata Tikta* which acts as *Srotoshodhana*, *Pitta Rechana*, *Anulomana* properties. *Tikta rasa* having *Kapha Medo Shoshna* properties acts on Diabetes and Cholesterol.
- *Chandraprabha Vati* exhibited anti hyperglycemic effects and attenuated alterations in lipid Profile. Also use in *Mutrakriccha*, *Daarbalya*, *Mandagni*.
- *Mamejava ghanvati* used in diabetes, it has *tikta rasa*, *laghu guna*, *ushna virya*, *katu vipaka* *kapha*, *pitta shamaka* and Anti diabetic properties.
- *Virechana Karma* Acts as Removing *Srotoavrodha*, Promotes detoxification and installing *Rasayana* properties through Toxins and stagnant excreta waste metabolites from body and also eradicate the root cause of diseases leading to a permanent cure of diseases.
- *Virechana karma* acts on liver Which is the seat for all microsomal enzymal activity. It improves metabolism which in turn reduces free fatty acids accumulation. This in turn results into weight loss and reduction in waist circumference. All these Conditions together help in pacifying symptoms of Metabolic Syndrome.

Conclusion

Thus on the basis of observations made in the present study it can be concluded that metabolic syndrome is *Meda* dominant disorders has strong resemblance with *Prameha* and *Sthaulaya/Medaroga*. Thus, it can be concluded that *Virechana karma* is *Samshodhana* procedure which helps in removing harmful diseases causing chemical by-products from the body, hence pacifying the symptoms of Metabolic Syndrome by *Srotoshodhana* of the body.

Reference

1. Sushruta Samhita sutra sthana 38/8-9.
2. Charaka Samhita, volume-1, Vidhyotini Vyakhaya, By Shree Satyanarayana Shastri, published by Chaukhamba Bharti Academy Nidana sthan 4/5, page no-632