IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

An Observational Study To Evaluate Etiopathogenesis Of *Shonithaabhishyanda*/Hyperlipidemia

Ramyashree A S[1] , Prashanth Jain [2] and Geetha B. Markande[3]

[1]Final year PG Scholar (Dept. of Roganidana Evum Vikriti Vigyan), Alva's Ayurveda Medical College and Hospital , Moodubidire, Karnataka , India.

[2]Professor and HOD (Dept. of P.G Studies in Roganidana Evum Vikriti Vigyan), Alva's Ayurveda Medical College and Hospital , Moodubidire , Karnataka , India.

[3]Professor (Dept. of Roganidana Evum Vikriti Vigyan), Alva's Ayurveda Medical College and Hospital , Moodubidire, Karnataka , India.

Abstract

21st century is the boon era of development in Technologies and Science, at the same time people are becoming the victim of lifestyle disorders. One such type of disorder is Hyperlipidemia. Abnormal high concentration of lipids in blood caused by abnormal lipid and lipoprotein metabolism is expressed as Hyperlipidemia. Though there is no precise terminology for Hyperlipidemia mentioned in Ayurveda classics, various scholars have tried to use distinct nomenclature for the same. The description of *Shonithaabhishyanda* matches with clinical state of Hyperlipidemia. It is a condition mentioned by Acharya Charaka, where *Santharpanajanya Nidana* and *Viruddha ahara* are the contributary factors. As a result, a particular questionnaire based on *Viruddha ahara* and *Santarpanotha nidana* was developed in order to look into etiology and pathogenesis. Understanding etiology and pathogenesis is the age old tool for diagnosis and management of any disease. By knowing the exact etiopathogenesis of *Shonithaabhishyanda* , one can prevent from the further sequels like *Dhamani Prathichaya, Margavarana* and related catastrophic events.

Keywords: *Shonithaabhishyanda, Viruddha ahara, Santharpanajanyanidana,*Hyperlipidemia

INTRODUCTION

Ayurveda is one of the most renowned traditional system of Medicine that imparts all the Knowledge of life. It defines health and factors responsible for its maintenance and promotion. It is a Pious Science which gives guidelines, as to what would be beneficial for the present as well as the future life. According to Acharya Charaka, our body is the final and supreme product of *Aahara. Aahara* has been given prime importance since the Vedic Period. It is not only needed for the continuity of life but for *Bala, Varna, Upachaya* etc also. In today's modern era, lack of Knowledge about proper eating habits is the primary reason for the increasing trend of lifestyle disorders.

Ayurveda cautions about unhealthy food and to be vigilant to prevent diseases by following appropriate food regimens and combinations. These guidelines may prove beneficial to all. In today's fast life culture where junk, stale (packaged or canned), fast food is in use on priority basis for time saving, late night parties and mobile has demolished the very own idea of food. In this scenario, the first pillar of health, that is food if partaken judiciously will help to maintain good health. Nowadays lifestyle disorders are becoming devastating as pandemic as they are primary cause of mortality in the modern world. Fast-paced Industrialization and Globalization have reduced physical activity levels and is making us lead an increasingly Sedentary Lifestyle.

Viruddha Ahara is very crucial aspect of present dietary habits and cooking patterns. This causes various harmful diseases knowingly and unknowingly to the patients. According to Ayurveda, these Lifestyle disorders can be correlated with *Santarpanajanya Vyadhi* which is caused mainly due to vitiation of *Kaphadosha* and *Medodhatu* in terms of their *Vriddhi.*

Shonithaabhishyanda is a condition mentioned by Acharya Charaka, where *santharpanajanya nidana* and *viruddha aharas* are the contributary factors and it is characterized by presence of excessive *kapha* and *medas* in the *Shonitha Dhathu*. It may further leads to *Dhamani prathichaya* and *Margavarana.* Abnormal high concentration of lipids in blood caused by abnormal lipid and lipoprotien metabolism is expressed as Hyperlipidemia. Plethora of clinical conditions that include Obesity, Diabetes mellitus, hypertension, Ischemic heart diseases, atherosclerosis etc. are predisposed by Hyperlipidemia.

Understanding etiology and pathogenesis is the age old tool for diagnosis and management of any disease. By knowing the exact etiopathogeneis of *shonithaabhishyanda* one can prevent from the further sequels like *Dhamani prathichaya, Margavarana* and related catastrophic events. Hence here is an attempt made to understand the Etiopathogenesis of *Shonithaabhishyanda/*Hyperlipidemia.

OBJECTIVES:

- To collect and evaluate textual references supporting the understating of Hyperlipidemia in Ayurveda.
- To study the etiology and pathogenesis of *Shonithaabhishyanda.*
- To prepare the questionnaire for the assessment of etiological factors of *Shonithaabhishyanda* /Hyperlipidemia.

MATERIALS AND METHODS

SOURCE OF DATA

- **LITERARY SOURCE**

  Literary source of Hyperlipidemia and its related concepts from modern textbooks, Ayurvedic texts, internet sources, and concerned articles, previous works done were reviewed and documented.

- **SAMPLE SOURCE**

  For the present study patients of either sex will be selected at random without any bias of social, economic or religious status from the O.P.D and I.P.D of Alva's Ayurveda Medical College, Laboratory and other referrals.

Study design :

The study will be an observational clinical study of 110 patients suffering from Hyperlipidemia.

METHOD OF COLLECTION OF DATA:

- 110 patients suffering with Hyperlipidemia was selected for the study.
- A special case proforma was prepared which includes details of history taking, physical signs and symptoms and required examination as mentioned in our classics and allied sciences.
- Questionnaire was prepared which includes *Nidana* of *Shonithaabhishyanda* mentioned in our classics and allied sciences. Patients were analysed and selected accordingly who fulfills the diagnostic and inclusion criteria.

DIAGNOSTIC CRITERIA:

Diagnosed based on following clinical features.

Any two of the following 4 criteria were considered.

1.Total Cholesterol >200mg/dL

2.Triglycerides > 150mg/dL

3. LDL cholesterol >130mg/dL

4. HDL cholesterol : male < 30mg/dL

female < 35mg/dL

INCLUSION CRITERIA :

1. Patients were selected accordingly who fulfills the diagnostic criteria.
2. Age group : 25-40 years.

EXCLUSION CRITERIA:

1. Patients having other systemic illnesses including IHD, DM, CVA, ILD.
2. Malignancy.
3. Hyperlipidemia due to drugs e.g. Glucocorticoids etc.
4. Alcoholics and Drug abusers

OBSERVATIONS AND RESULTS

In the present study, 110 patients presenting with Hyperlipidemia is screened. All the patients fulfilled the diagnostic and inclusion criteria. Therefore, study was conducted on 110 patients with specially designed case proforma containing history recording, physical examination, investigation, *Nidanas* and detailed assessment of specially designed questionnaires for *Nidana* of *Shonithaabhishyanda.* It is Observed that out of 110 patients, 48% belonged to the age group of 25-30 years. The gender wise distribution showed the majority of the patients were female 51%. Data related to occupation showed a maximum of 56% were employees. Regarding the diagnostic features all the patients 56.1% of patients had raised Total cholesterol, 40% had raised triglycerides, 42.9% had raised LDL and 26.8% had reduced HDL.

RESULTS - In the present study, *Nidana* and *Samprapti* mentioned in the classics and in the contemporary medicine in relation with *Shonithaabhishyanda* analysed based on observations made on 110 subjects. Result is presented and subjected to statistical analysis as follows. All parameters of the study were taken for analysis in SPSS version – 20 . Results are analysed using Pearson Co-relation coefficient test. On calculation, if r = +1 (Perfectly positive correlation)

r = -1 (Perfectly negative correlation)

0<r<1(moderately positive correlation)

-1<r<0(moderately negative correlation)

r = 0 (negative correlation)

Table No.50 Likert Scale of Frequency

Sl.no	Likert scale of frequency	Score	Frequency of Indulgence
1	Never	0	Never
2	Rarely	1	1-2 times a month
3	Sometimes	2	1-2 times a week
4	Often	3	3-4 times a week
5	Frequently or Daily	4	Daily

Statistical Significance

- If P value > 0.05 indicates non-significant
- If P value ranging from <0.05 to 0.001 indicates significant
- If P value < 0.001 indicates highly significant.

Table No.51 Results of Statistical Analysis using Pearson Correlation coefficient test.

NIDANA		Diagnostic features			
		Total Cholesterol	Triglycerides	LDL Cholesterol	HDL Cholesterol
Non Veg food	R-value	0.177	0.073	0.241	-0.255
	p-value	0.0058	0.041	0.011	0.007
	Result	S Positive corelation	S Positive Corelation	S Moderate positive Corelation	S Negative Corelation
Fish with Ghee and coconut oil	R-value	0.057	0.057	0.233	-0.042
	p-value	0.556	0.556	0.014	0.574
	Result	NS	NS	S Positive corelation	NS
Fish with Milk	R-value	-0.020	-0.020	0.258	-0.195
	p-value	0.846	0.846	0.034	0.154
	Result	NS	NS	NS	NS
Fish with coffee	R-value	0.901	0.149	0.259	-0.142
	P-value	0.047	0.0340	0.014	0.159
	Result	S Positive corelation	S Positive corelation	S Positive corelation	NS
Fish with tea	R-value	1.173	-0.052	0.262	-0.062
	P-value	0.042	0.610	0.023	0.540
	Result	S Positive corelation	NS	S Positive Corelation	NS
Fish with Milkshake	R-value	-0.023	-0.033	-0.043	-0.043
	P-value	0.824	0.424	0.544	0.544
	Result	NS	NS	NS	NS
Fish with Curd	R-value	0.198	0.108	-0.123	-0.032
	P-value	0.548	0.323	0.283	0.754

	Result	**NS**	**NS**	**NS**	**NS**
Fish with Buttermilk	**R-value**	-0.004	-0.134	-0.134	-0.032
	P-value	0.971	0.771	0.771	0.754
	Result	**NS**	**NS**	**NS**	**NS**
Mustard oil	**R-value**	0.084	0.004	-0.036	0.092
	p-value	0.383	0.765	0.708	0.337
	Result	**NS**	**NS**	**NS**	**NS**
Mustard oil and coffee	**R-Value**	0.034	-0.073	-0.042	-0.134
	P-value	0.036	0.0434	0.534	0.534
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Mustard oil and Milkshake	**R-value**	-0.120	-0.130	-0.123	-0.012
	P-value	0.233	0.873	0.786	0.656
	Result	**NS**	**NS**	**NS**	**NS**
Mustard oil and Buttermilk	**R-value**	-0.045	-0.045	0.003	0.005
	P-value	0.659	0.659	0.659	0.879
	Result	**NS**	**NS**	**NS**	**NS**
Mustard oil and Curd	**R-value**	-0.013	-0.015	-0.043	-0.023
	P-value	0.898	0.354	0.765	0.678
	Result	**NS**	**NS**	**NS**	**NS**
Prawns and Ghee or coconut oil	**R-value**	0.034	0.034	-0.118	-0.118
	p-value	0.036	0.033	0.241	0.241
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Prawns and Milk	**R-value**	-0.067	-0.057	-0.058	-0.058
	P-value	0.507	0.677	0.757	0.757
	Result	**NS**	**NS**	**NS**	**NS**
Prawns and tea	**R-Value**	0.164	0.108	0.756	-0.255

	P-value	0.104	0.412	0.223	0.007
	Result	**NS**	**NS**	**NS**	**S Negative corelation**
Prawns and coffee	**R-value**	0.164	0.108	0.756	-0.255
	P-value	0.0104	0012	0.023	0.007
	Result	**S Positive Corelation**	**S Positive corelation**	**S Positive corelation**	**S Positive Corelation**
Prawns and Milkshake	**R-value**	-0069	-0169	-0059	-0139
	P-value	0.435	0.435	0.345	0.765
	Result	**NS**	**NS**	**NS**	**NS**
Prawns and Buttermilk	**R-value**	0.057	0.012	0.014	0.114
	P-value	0.556	0.756	0.476	0.776
	Result	**NS**	**NS**	**NS**	**NS**
Prawns and curd	**R-value**	0.801	0.116	0.576	-0.032
	P-value	0.032	0.023	0.023	0.754
	Result	**S Positive corelation**	**S Positive corelation**	**S Positive corelation**	**NS**
Leafy vegetables and Milk	**R-value**	0.078	0.078	-0.002	-0.103
	p-value	0.522	0.522	0.985	0.285
	Result	**NS**	**NS**	**NS**	**NS**
Leafy vegetables and tea	**R-Value**	-0.255	-0.020	-0.224	-0.030
	P-value	0.007	0.684	0.650	0.780
	Result	**S Negative corelation**	**NS**	**NS**	**NS**
Leafy vegetables and coffee	**R-value**	-0.287	-0.297	-0.102	-0.212
	P-value	0.032	0.043	0.342	0.542
	Result	**S Negative corelation**	**S Negative corelation**	**NS**	**NS**
Leafy vegetables and Milkshake	**R-value**	-0.143	-0.122	-0.132	-0.232
	P-value	0.051	0.228	0.348	0.538

	Result	**NS**	**NS**	**NS**	**NS**
Leafy vegetables and curd	**R-value**	0.198	0.116	0.136	0.346
	P-value	0.034	0.023	0.033	0.013
	Result	**S Positive corelation**	**S Positive corelation**	**S Positive corelation**	**S Positive corelation**
Leafy vegetables and buttermilk	**R-value**	-0.231	-0.231	-0.272	-0.101
	P-value	0.265	0.265	0.325	0.325
	Result	**NS**	**NS**	**NS**	**NS**
Madhura rasa	**R-value**	0.127	0.239	-0.110	-0.032
	p-value	0.016	0.026	0.252	0.739
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Kushmanda	**R-value**	0.173	0.027	0.047	0.119
	p-value	0.071	0.778	0.623	0.214
	Result	**NS**	**NS**	**NS**	**NS**
Jackfruit	**R-value**	0.068	0.022	0.068	0.150
	p-value	0.048	0.012	0.481	0.119
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Guda vikara	**R-value**	0.097	0.063	-0.124	-0.057
	p-value	0.312	0.514	0.197	0.553
	Result	**NS**	**NS**	**NS**	**NS**
Ikshu vikara	**R-value**	0.034	-0.075	-0.041	-0.003
	p-value	0.045	0.040	0.673	0.977
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Masha	**R-value**	0.078	0.061	-0.025	-0.034
	p-value	0.415	0.022	0.019	0.724
	Result	**NS**	**S Positive corelation**	**S Positive corelation**	**NS**

Godhuma	**R-value**	0.205	-0.040	-0.090	0.448
	p-value	0.061	0.681	0.352	0.035
	Result	**NS**	**NS**	**NS**	**S Positive Corelation**
Godhuma with Navaneeta	**R-value**	0.784	0.093	0.277	-0.023
	p-value	0.007	0.033	0.044	0.811
	Result	**S Positive corelation**	**S Positive corelation**	**S Positive corelation**	**NS**
Raktha Shali (Boiled rice)	**R-value**	-0.037	-0.034	0.138	0.165
	p-value	0.704	0.728	0.151	0.085
	Result	**NS**	**NS**	**NS**	**NS**
Navanna (White rice)	**R-value**	0.149	0.277	-0.179	0.032
	p-value	0.038	0.044	0.062	0.737
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Snigdha ahara/Oily foods	**R-value**	0.448	0.022	1.122	0.075
	p-value	0.035	0.032	0.027	0.438
	Result	**S Positive corelation**	**S Positive corelation**	**S Perfectly positive corelation**	**NS**
Junk foods	**R-value**	1.231	0.101	1.124	-0.255
	p-value	0.013	0.018	0.011	0.007
	Result	**S Perfectly positive corelation**	**S Positive corelation**	**S Perfectly Positive corelation**	**S Negative Corelation**
Ghee	**R-value**	-0.168	0.004	-0.005	-0.034
	p-value	0.079	0.968	0.963	0.725
	Result	**NS**	**NS**	**NS**	**NS**
Milk	**R-value**	-0.008	-0.030	-0.021	-0.185
	p-value	0.932	0.753	0.824	0.018
	Result	**NS**	**NS**	**NS**	**S Negative**

					Corelation
Unboiled Milk	**R-value**	-0.152	0.036	0.029	-0.073
	p-value	0.113	0.707	0.763	0.448
	Result	**NS**	**NS**	**NS**	**NS**
Milk products	**R-value**	1.124	0.060	1.211	-0.061
	p-value	0.023	0.531	0.012	0.525
	Result	**S Perfectly Positive corelation**	**NS**	**S Perfectly Positive corelation**	**NS**
Milkshake	**R-value**	0.186	0.167	-0.098	-0.059
	p-value	0.037	0.041	0.307	0.541
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Buffalo Milk	**R-value**	-0.088	0.210	-0.013	-0.005
	p-value	0.363	0.028	0.892	0.958
	Result	**NS**	**S Positive corelation**	**NS**	**NS**
Curd at night	**R-value**	0.071	0.096	0.025	0.198
	p-value	0.460	0.319	0.797	0.013
	Result	**NS**	**NS**	**NS**	**S Positive Corelation**
Icecreams	**R-value**	0.276	0.073	0.736	0.069
	p-value	0.034	0.042	0.002	0.472
	Result	**S Positive corelation**	**S Positive corelation**	**S Positive corelation**	**NS**
Chicken	**R-value**	0.200	-0.025	0.086	0.074
	p-value	0.026	0.792	0.373	0.440
	Result	**S Postive corelation**	**NS**	**NS**	**NS**
Mutton	**R-value**	-0.075	-0.024	1.106	0.078
	p-value	0.032	0.805	0.003	0.416

	Result	**S Positive corelation**	**NS**	**S Perfectly Positive corelation**	**NS**
Pork	**R-value**	0.109	0.051	0.089	0.027
	p-value	0.025	0.059	0.035	0.779
	Result	**S Positive corelation**	**S Positive corelation**	**S Positive corelation**	**NS**
Beaf	**R-value**	0.074	0.035	0.041	0.006
	p-value	0.042	0.012	0.032	0.950
	Result	**S Positive corelation**	**S Positive corelation**	**S Positive corelation**	**NS**
Ahara kala (Regular interval)	**R-value**	-0.019	0.105	-0.087	-0.105
	p-value	0.842	0.275	0.367	0.276
	Result	**NS**	**NS**	**NS**	**NS**
Ahara kala (Irregular interval)	**R-value**	0.027	-0.026	0.017	0.050
	p-value	0.777	0.789	0.858	0.602
	Result	**NS**	**NS**	**NS**	**NS**
Santarpana	**R-value**	1.041	0.041	0.006	0.145
	p-value	0.023	0.021	0.950	0.131
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Adhyashana	**R-value**	0.045	0.024	-0.028	-0.178
	p-value	0.642	0.802	0.771	0.063
	Result	**NS**	**NS**	**NS**	**NS**
Diwaswapna	**R-value**	0.076	0.042	0.085	-0.118
	p-value	0.033	0.664	0.376	0.219
	Result	**S Positive corelation**	**NS**	**NS**	**NS**
	R-value	0.023	0.183	0.026	-0.055

Kaalatiswapna	**p-value**	0.051	0.056	0.784	0.570
	Result	**S Positive corelation**	**S Positive corelation**	**NS**	**NS**
Avyayama	**R-value**	0.329	0.106	1.122	-0.287
	p-value	0.048	0.036	0.027	0.032
	Result	**S Positive corelation**	**S Positive corelation**	**S Perfectly Positive corelation**	**S Negative corelation**
Achintha	**R-value**	-0.009	-0.002	0.063	-0.023
	p-value	0.924	0.981	0.514	0.812
	Result	**NS**	**NS**	**NS**	**NS**
Harshanityatwat	**R-value**	0.064	-0.083	0.069	0.018
	p-value	0.509	0.387	0.471	0.854
	Result	**NS**	**NS**	**NS**	**NS**
Sedentary Lifestyle	**R-value**	0.448	0.087	0.038	-0.203
	p-value	0.035	0.036	0.012	0.033
	Result	**S Positive corelation**	**S Postive corelation**	**S Positive corelation**	**S Negative Corelation**

DISCUSSION ON OBSERVATION

On BMI:

High intake of saturated fats, trans fats, cholesterol, and lack of physical activity and high stress levels can contribute to elevated lipid levels even in people with normal BMI. Intravascular changes associated with hyperlipidemia can occur even in individuals with a normal BMI[1].

DISCUSSION ON *VIRUDDHA AHARA* –

Excessive consumption of *Viruddha Ahara* like *Mathsya* along with *Payas* showed statistical significance. Hence found to have a definite role in causation of *Shonithaabhishyanda*. *Atisevana* of *Mathsya* along with *Payas* cause *Rakthavaha Srotodushti* because of contradiction in their *veerya*, leading to *Shonithabhishyanda*[2]. Excessive consumption of *Chilichima mathsya* and *Payas* causes increase in *medas* since both have *Madhura vipaka*, but *chilichima mathsya* is having *ushna veerya* and *milk* is with *sheetha veerya* which are contradicting mutually[3]. This results in excessive accumulation of *kapha* and *medas* on the walls of *Dhamani* leading to *Dhamani prathichaya*[4]. Prawns are high in dietary cholesterol. Eating Shrimp increases the level of LDL cholesterol. But the level of HDL cholesterol also rise Consuming them

in large quantity along with the coffee may affect individual cholesterol levels[5]. *Sarshapa taila brishta Aahara* found to have significant role in manifestation of *Shonithaabhishyanda.* Due to *Jataragni mandya*, there is production of *Ama* leading to vitiation of *Rasa dhathu* and *Rasavaha srothas*[6]. Mustard oil containing high erucic acid could be harmful to cardiovascular health[7].

DISCUSSION ON *SANTARPANOTHA AHARA-*

Excessive consumption of *Santarpanotha Ahara* on a daily basis showed statistical significance. Hence found to have a definite role in causation of *Shonithaabhishyanda. Madhura rasa* due to *Guru guna,* it aggravates *kapha* and causes *mandagni* leading to production of *Ama* and vitiation of *Rasadhathu* and *Rasavaha srothas*[8]. High sugar intake, particularly from refined sugars and fructose, can raise triglycerides levels[9].

Panasa is of *Madhura* and *Kashaya rasa, guru Snigdha guna* and *Madhura vipaka, sheetha veerya*, *vata pitta shamaka* and *kapha vardhaka.* if jackfruit is consumed in excess prepared with added sugars or unhealthy fats, it could contribute to an increased caloric intake, which might indirectly affect cholesterol levels[10].

Masha is *snigdha, sara, guru, Ushna* and *Vireka krit, balya,* It is *Medha pitta kaphapradah*, *Mamsabala pradah* and *Brumhana*. if urad dal is cooked with a lot of oil or ghee, the fat content can increase, which might impact on cholesterol levels[11]. Regular intake of *Godhuma* which causes *Kaphavardhaka, Mamsa and Medhodathu* gets increased by consuming this regularly[12], Butter is high in calories and saturated and trans fat, both of which may increase the LDL cholesterol[13].

Freshly harvested rice is hard to digest, it pocesses *Madhura rasa, sheetha veerya, Madhura vipaka, snigdha* and *balya.* According to *Bhavaprakasha Navanna pocessess Madhura rasa* and it is *kapha vardhaka* and its excessive use in daily routine results in *Santarpanajanya Vyadhis*[14]. Therefore evidence suggests eating refined grains, such as white rice, may contribute to a person developing high cholesterol levels[15]. *Snigdha Ahara*/oily foods like Fried foods, such as deep-fried meats and cheese sticks, are high in cholesterol[16]. Oily foods particularly those high in saturated fats and trans fats, can contribute to high cholesterol levels[17].

As per Ayurveda junk food can be considered as *Viruddha Aahara* which is said to be the cause of many systemic disorders like Dyslipidemia if it is consumed on a regular basis[18]. Excessive consumption of *Ksheera Vikaras* is *kaphakara.* Therefore Dairy products can contribute to increased cholesterol levels primarily due to their saturated fat content[19].

Regular consumption of Milkshakes like milk along with certain fruits like banana and sour fruits causes antigen-antibody reactions and impact white blood cells, potentially leading to various disorders[20]. Consuming *Mahisha ksheera* on a regular basis leads to *shonithaabhishyanda*[21]. The saturated fats found in buffalo milk can raise LDL levels[22]**.** Ice cream can be high in saturated fat and refined sugar, Regularly consuming large quantities of this dessert can potentially increase LDL cholesterol levels in the blood[23].

Mamsa rasa is considered as *Brimhana* and have qualities like *guru, sheeta, snigdha* and *mrudu*. Excess consumption of chicken, mutton, pork and beaf increases *Kapha,* which does *Mamsa Pushti* and it also pocesses *Abhishyandi guna*[24]. Chicken consumption can contribute to increased cholesterol levels primarily through its fat content[25]. Mutton, like other red meats, can increase cholesterol levels if consumed in large quantities or cooked with a lot of oil[26]. Pork is a type of Red meat that is rich in proteins, vitamins, and minerals and also contain high amounts of saturated fats, cholesterol and omega-6 fatty acids like linoleic acid[27]. Beef can increase cholesterol and LDL levels because it contains saturated fat[28].

DISCUSSION ON *VIHARAJA NIDANA* :

Diwaswapna is responsible for increase in the *snigdha guna***.** *Diwaswapna* increases *Kapha* further vitiates *Medas* leading to the formation of *Agnimandya*. Sleeping during day time is *Abhishyandikara* which increses *medodhathu*[29]. The incidence of cardiac events risk factors like incresead LDL cholesterol is higher in habitual nappers[30]. *kaalathiswapna leads to aggravation of Kapha dosha and srotho avarodha leading to santharpanotha vikaras like obesity and diseases due to increased kapha and medas like shonithaabhishyanda*[31].

CONCLUSION:

Shonithabhishyanda is a condition where *santharpanajanya nidana* and *virudha aharas* are the contributary factors and it is characterized by presence of excessive *kapha* and *medas* in the *Shonitha Dhathu* which was analysed in the present observational study. This study confirms *Viruddha Aahara* and *Santarpanotha Nidana* are the causative factors for *Shonithaabhishyanda* as it is also a multifactorial diseases which is mentioned in the classics. Under the concept of *Viruddha Aahara-Mathsya* along with *payas*, *sarshapataila brishta Aahara* along with *payas,* and *Chilichima mathsya* along with *payas* found to have role in causation of *Shonithaabhishyanda.* Among *Santharponatha Nidana, Shonithaabhishyanda* is caused by *Madhura rasa, panasa, masha, godhuma* with *navaneeta, Navaanna, snigdha Aahara*/oily foods, *Ksheera vikaras, Mahisha dugdha , viruddha Aaharas* like junk foods, milkshakes, ice creams and consumption of Non-veg foods & *Santarpanotha ahara* . Among *Viharaja nidanas, Diwaswapna, kaalatiswapna, Avyayama* are the leading sedentary lifestyle & it was found to have role in causation of *Shonithaabhishyanda.* High intake of saturated fats, trans fats, cholesterol, and lack of physical activity and high stress levels can contribute to elevated lipid levels even in people with normal BMI. From the observation and results of various *Nidanas* explained in different classics, above mentioned *Nidanas* are associated with the manifestation of *Shonithaabhishyanda.* Hence Alternate hypothesis is accepted and null hypothesis is rejected.

REFERENCES:

1. Hill MF, Bordoni B. Hyperlipidemia. [Updated 2023 Aug 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK559182/
2. https://ayushdhara.in/index.php/ayushdhara/article/download/337/270/836
3. Yadavji Trikamji Acharya editor. Charaka Samhitha, Varanasi: Choukhambha Surbharati Prakashan; 2008.p.149-150.
4. Yadavji Trikamji Acharya editor. Charaka Samhitha, Varanasi: Choukhambha Surbharati Prakashan; 2008.p.149-150.
5. https://www.mayoclinicproceedings.org/article/S0025-6196(20)31381-1/fulltext
6. https://ayushdhara.in/index.php/ayushdhara/article/download/337/270/836
7. https://www.sciencedirect.com/science/article/abs/pii/S1933287421002609
8. Vaidya Yadavji Trikamji Acharya (ed) Charaka Samhitha by Agnivesha Revised by Charaka and Dridabala with Ayurveda Deepika Commentary by Chakrapani, 2007 Reprint, Varanasi; Chaukambha Prakashana; 2007, Sustrasthana 26/42/1, pp.143-144.
9. https://www.apollohospitals.com/delhi/blog/how-sugar-affects-your cholesterol/
10. https://www.easyayurveda.com/2017/05/24/jackfruit-uses/
11. https://www.easyayurveda.com/2019/10/18/black-gram-urad-dal/
12. Acharya Vagbhata, Ashtanga Hrudaya with Sarvanga Sundara Arunadatta Commentary and Ayurveda Rasayana Hemadri, Edited by Pt. Harisadashiva Shastri Paradalkara. Chaukambha Surabharati Prakashan, Varanasi, Reprint 2009, Sutrasthana 5/35.
13. https://www.heart.org/en/healthy-living/healthy-eating/eat smart/fats/saturatedfats#:~:text=AHA%20Recommendation,fat%2C%20processed%20foods%20and%20alcohol.
14. https://www.chakrapaniayurveda.com/newsletters/ayurvedic-view-on-rice/#:~:text=The%20Ayurvedic%20treatise%20Charaka%20Samhita,skin%20diseases%20and%20premature%20aging.
15. https://www.medicalnewstoday.com/articles/is-rice-bad-for-cholesterol
16. https://jaims.in/jaims/article/view/2348/3055
17. https://www.healthline.com/nutrition/high-cholesterol-foods
18. Sason R, Sharma M. A review article on effect of incompatible food w.s.r. to junk food on health and its ayurvedic aspect. Int J Health Sci Res. 2019; 9(5):341-346.
19. Lordan R, Tsoupras A, Mitra B, Zabetakis I. Dairy Fats and Cardiovascular Disease: Do We Really Need to be Concerned? Foods. 2018 Mar 1;7(3):29. doi: 10.3390/foods7030029. PMID: 29494487; PMCID: PMC5867544.
20. Sabnis M. Viruddha Ahara: A critical view. Ayu. 2012 Jul;33(3):332-6. doi: 10.4103/0974-8520.108817. PMID: 23723637; PMCID: PMC3665091

21. https://www.easyayurveda.com/2011/04/20/buffalo-meat-buffalo-milk-and-buffalo-products-benefits-and-ayurvedic-explanation/
22. https://www.truemeds.in/blog/buffalo-milk-benefits-uses-side-effects
23. https://www.medicalnewstoday.com/articles/cholesterol-and-ice-cream
24. Jayveer Singh Solanki Et Al: Charkokta Mamsavarga - An Elaborative Study. International Ayurvedic Medical Journal {online} 2019 {cited June, 2019} Available from: http://www.iamj.in/posts/images/upload/971_974.pdz
25. https://prodiadigital.com/en/articles/5-high-cholesterol-foods-to-avoid
26. https://www.healthline.com/health/food-nutrition/lamb-and-cholesterol#The-cholesterol-factor
27. .https://www.medicinenet.com/is_pork_bad_for_you_and_is_it_worse_than_beef/article.htm
28. https://en.wikipedia.org/wiki/Beef
29. https://www.worldwidejournals.com/global-journal-for-research-analysis-GJRA/fileview/review-on-concept-of-day-sleeping-w-s-r-to-charak-samhita_November_2019_1573190082_7609051.pdf
30. Mantua J, Spencer RMC. Exploring the nap paradox: are mid-day sleep bouts a friend or foe? Sleep Med. 2017 Sep;37:88-97. doi: 10.1016/j.sleep.2017.01.019. Epub 2017 Mar 6. PMID: 28899546; PMCID: PMC5598771.
31. https://www.researchgate.net/publication/328027979_A_SCIENTIFIC_AYURVEDIC_EXPLORATION_OF_CONCEPT_OF_SLEEP_NIDRA.