Management of Insulin Resistance through Ayurveda: A Case Study

Farida Begum Shaikh¹, Shwetambari²

¹Professor, ²PG Scholar, ^{1,2}Department of PG Studies in Kayachikitsa, Taranath Government Ayurvedic Medical College and Hospital, Ballari, Karnataka, India

ABSTRACT

Insulin resistance is developed when cells does not respond to insulin hormone leading to increased blood sugar levels. In Insulin resistance state have impaired glucose metabolism. Insulin resistance is a syndrome leading to a group of diseases like high cholesterol, high blood sugar level, high blood pressure, PCOS, non alcoholic fatty liver disease. The primary cause of insulin resistance is unknown but some theory suggests that obesity is the main cause of increased insulin resistance. Many patients with type 2 diabetes mellitus associated with high blood pressure, dyslipidemia this is due to insulin resistance. And due to high blood pressure and uncontrolled blood sugar levels people will land up in cardiovascular disease, cerebrovascular disease. The prevalence rate of insulin resistance was 15.5% to 46.5%. To diagnose insulin resistance fasting serum insulin test, glucose tolerance testing, hyperinsulinemic euglycemic clamp, double waist size to there respective height is the commonest technique to check insulin resistance. This present article deals with known case of obesity with serum fasting insulin raised posted for Virechanaster Virechanaserum fasting insulin reduced and also reduced weight In this patient main culprit is the sedentary lifestyle, obesity which is cause of insulin resistance,

How to cite this paper: Farida Begum Shaikh | Shwetambari "Management of Insulin Resistance through Ayurveda: A Case Study" Published in International

Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-6 | Issue-2, February 2022, pp.1289-1291, URL:



www.ijtsrd.com/papers/ijtsrd49428.pdf

Copyright © 2022 by author (s) and International Journal of Trend in Scientific Research and Development

Journal. This is an Open Access article distributed under the



terms of the Creative Commons Attribution License (CC BY 4.0) (http://creativecommons.org/licenses/by/4.0)

KEYWORDS: TDM2 – Type 2 diabetes mellitus,IR – insulin resistance, Virechana

1. INTRODUCTION

The insulin resistance is caused due to sedentary lifestyle. and using excess packed foods where the preservative will be added, beverages, food with high glycemic index this are the main causes of metabolic syndrome, vitamin D deficiency is also associated with insulin resistance. IGFI genes are associated insulin resistance. Acute and chronic inflammation can cause insulin resistance. Some medications like protease inhibitors, corticosteroids, atypical antipsychotics, growth hormone, cortisol and human placental lactogen are risk factors for insulin resistance. Lack of leptin hormone will cause severe obesity, hepatitis C makes people more prone for insulin resistance. Inspite of all this cause by following proper Dinacharya, Rutucharya, Nitya Abyanga, Nitya Vyayama to particular extinct can be done. by following this insulin resistance can be prevented. Panchakarma treatment followed properly

normalize carbohydrate metabolism, protein metabolism, lipid metabolism which in turn reduces TDM2,CVS,CVD in *Ayurved* insulin resistance may be told as *Ama*, *Avarana* which is the cause of all disease.

CASE STUDY

A male of 51 years, came to Taranath hospital to Out patient department no-1 with c/o *Atimutrata*, *Dourbalya* since 10 days came for *Ayurvedic* management. Patient is not on any type of allopathy medicines. Patient is posted for *Virechana* followed by oral medications.

General examination– central obesity was present, Acanthosis nigricans was present infection no muscle atrophy/foot ulcers. BP – 140/100 mm Hg and pulse – 88/m weight – 106kg, height – 160 cm BMI- 32.7 kg/m²

International Journal of Trend in Scientific Research and Development @ www.ijtsrd.com eISSN: 2456-6470

Central nervous system	Conscious and well oriented
Respiratory	Normal vesicular breath
system	sound 18/min
Cardiovascular system	S1 S2 heard no murmurs
Per abdomen	Soft and non tender

Nadi was Vatakapha, Jivha was liptata, Kosta was Madhyama, Prakruti was Vatakapha, Dosha was Kapha, Pitta, Vata, Dushya was Meda, Mamsa, Kala was Sharat Rutu, Desha is Jangala Desa, Sara was Meda, Satva is Pravara, Ahara Shakti is Pravara.

This patient was overweight and posted for *Virechana* with *Snehapana Murchita Tila Taila* which is given for 4 days (*Arohana Krama*). *Sarvangabyanga* with *Murchita Tila Taila* followed by *Patrapinda Sweda* and *Virechana* with tab 2 *Abayamodaka Vati* with

cold water. No of *Vegas* – 06 and *samarjana krama* is followed for 3 days.

Intervention planned

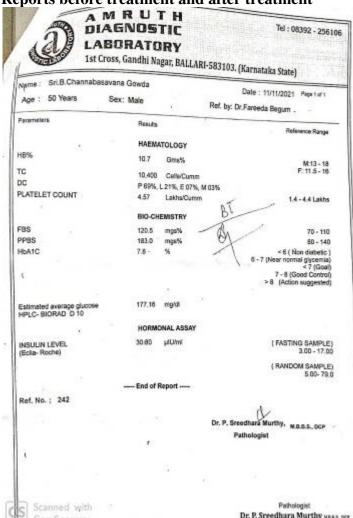
Deepana pacana with panchakola churna		
Snehapana with murchita tila taila was given in		
Arohana Krama for 4 days		
sarvangabyanga with Murchita tila taila		
Followed by Patrapinda sweda		
Tablet abayamodaka vati 2 with water		
No of vegas 6		
Samsarjana karma followed for 3 days.		

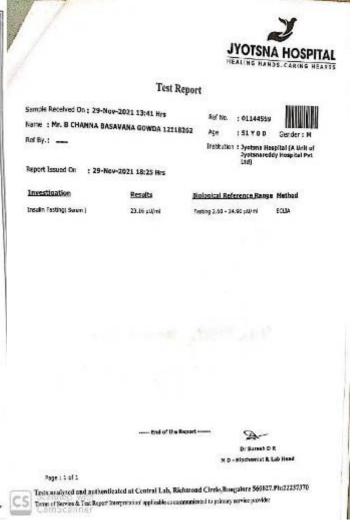
Oral medications given

Nishamalaki churna 1tsp 3 times a day with hot water before food

Panchatikta Kashaya 15ml 3 times a day with water before food

Reports before treatment and after treatment





Effect of intervention on subjective parameters

Before	After	Observation	
treatment	treatment		
Atimutrata- 3	Atimutrata-0	Complete relief	
Dourbalya – 3	Dourbalya – 0	Complete relief	

Effect of intervention on objective parameters

Before treatment	After treatment	Observation
Serum fasting	Serum fasting	
insulin- 30.80	insulin-	50% relief
μ/ml	23.16μ/ml	
$BMI-32.7kg/m^2$	BMI-29.6kg/m ²	30% relief
Weight-106 kg	Weight- 96kg	50% relief

DISCUSSION – Insulin resistance can be merely said as Medavruta Vata¹ because due to insulin resistance the fat cells and muscle cells there will be obstruction that is Avarana hence this Avarana should be cleared by tikshna virechana so tablet Abayamodaka Vati for Virechana which is Tikshna in Karmukata was chosen. Some other treatments mentioned to reduce insulin resistance in our classics vatakaphahara, Medahara, Rooksha², Ushna Tikshna Basti with drugs that are Tikshna, Ruksha Udvartana, intake of Guduchi, Musta, Triphala, administration of Takrarista, administration of honey, intake of Vidanga, Nagara, Yavaksara, Loha Bhasma with honey and powder of Yava, administration of Shilajatu, Agnimantha juice, administration of honey along with decoction of Bilvadi Panchamula.intake of Priyangu, Syamaka, Yavaka, Yava, Kodrava, Mudga, Kulattha, Adhaki with Patola, Amalaki, Madhudaka, Arista which does Meda, Mamsahara. In body fat cells and muscle cells require insulin to absorb glucose. When these fails to respond then blood sugar level increases. In insulin resistance state fat cells results in reduced uptake of lipids and increased hydrolysis of triglycerides leading to increased fatty acids in blood. And this proinflammatory cytokines, interleukins 1 disrupt normal insulin action causing insulin resistance Here in this case obesity, metabolism is also hampered hence planned for Virechana.

Pathya advised –kodrava, chanaka, Yava is soaked in Triphala Kashaya³ for 1 night and in morning washed properly and boiled, then further used.

CONCLUSON- As insulin resistance is told as the important cause for many disorders. By following

proper *Dinacharya*, *Rutucharya* and *Ruthu Shodana* is the best treatment modality to reduce the insulin resistance as it does the *margavarana* and does *Srotoshodana*. Due to *Margavarana* the fat metabolism is abnormal forming atherosclerosis hence by *Virechana* the *Pittahara* and *Vatahara* effects are seen and also fat metabolism, protein metabolism will become normal further normalizing insulin resistance.

References -

- [1] Acharya Agnivesha's .Charaka Samhita., Revised by Charaka And Dridhabala with The Ayurveda Dipika Commentary Of Chakrapanidatta, Edited by Vaidhya Yadavji Trikamji Acharya, Varanasi; Choukambha Surabharati Prakashana, Reprint 2020. Sutra sthana 28th chapter sloka no – 65-66. Page no-451
- [2] Acharya Agnivesha's .Charaka Samhita., Revised by Charaka And Dridhabala with The Ayurveda Dipika Commentary Of Chakrapanidatta, Edited by Vaidhya Yadavji Trikamji Acharya, Varanasi; Choukambha Surabharati Prakashana, Reprint 2020. Sutra sthana 17th chapter sloka no 21-28. Page no-
- Acharya Agnivesha's .Charaka Samhita., Revised by Charaka And Dridhabala with The Ayurveda Dipika Commentary Of Chakrapanidatta, Edited by Vaidhya Yadavji Trikamji Acharya, Varanasi; Choukambha Surabharati Prakashana, Reprint 2020. Chikitsa sthana 6th chapter sloka no –. Page no- 27