

## Management of Uncontrolled Type-2 Diabetes Mellitus with Virechana Therapy: A Case Study

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### Abstract

**Background** - A majority of diabetics are unable to keep sugars under control despite adequate medication and follow ups. In some cases, even treatment with insulin does not help in sugar control. 40% of diabetics who carefully control their blood sugar nevertheless develop neuropathy and nephropathy. The case of uncontrolled type2 Diabetes Mellitus, was managed with Virechana, one of the Panchakarma therapy, as indicated in 'Brihat-trayi (major and prime texts of Ayurveda). **Management** --Pachan (internal medicines to facilitate proper digestion) – *Hingvashtak churna*- 1gm x three times before food with warm water for two days was given. Internal oleation with *Triphala ghrita* in increasing order for four days (oleation stopped, as symptoms of proper oleation achieved) was followed. Daily assessment for symptoms of oleation was done. External oleation and sudation was done with Sesame oil. **Virechana drug** - *Abhayadi modak* - 500mg with decoction of *Triphala* 150ml was given on empty stomach. **Results and Conclusion** – BSL fasting and pp before Virechana was 240mg/dl and 431mg/dl. After seven days, one month and four months, fasting sugar was 190mg/dl, 153mg/dl and 169mg/dl respectively while post prandial sugar was 265mg/dl, 180mg/dl and 228 respectively. HbA1, HbA1C and MBG after seven days of Virechana was 10.9%, 8.4% and 215 respectively and after quarter to five months it was 9.2%, 6.97% and 153 respectively. There was significant increase in HDL cholesterol from 37 mg/dl to 63mg/dl. Thus Virechana therapy has significant therapeutic value in Type2 Diabetes Mellitus.

### Keywords

*Diabetes, Mellitus, Virechana, type-2*



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## INTRODUCTION

Diabetes is rapidly gaining the status of a potential epidemic in India with more than 62 million diabetic individuals currently diagnosed with the disease. According to Wild *et al.*, the prevalence of diabetes is predicted to double globally from 171 million in 2000 to 366 million in 2030 with a maximum increase in India. India currently faces an uncertain future in relation to the potential burden that diabetes may impose upon the country. There is now the demand for urgent research and intervention - at regional and national levels - to try to mitigate the potentially catastrophic increase in diabetes that is predicted for the upcoming years<sup>1</sup>. A majority of diabetics are unable to keep sugars under control despite adequate medication and follow ups. In some cases, even treatment with insulin does not help in sugar control. Forty percent of diabetics who carefully control their blood sugar nevertheless develop neuropathy and nephropathy<sup>2</sup>. An estimate shows that nearly 1 million Indians die due to Diabetes every year. This case of uncontrolled diabetes, managed with an Ayurvedic intervention is really a hope for better solution to treat the disease effectively, when conventional

therapy fails. Previous studies carried out have not included the patients of uncontrolled type2 Diabetes mellitus<sup>3-5</sup>. Rather these patients were excluded from the study. History of disease more than ten years was excluded. This patient was having history of 12 years. HbA1C values repeated after 6 months in this case showed about 1.5% reduction. DM correlates with *Prameha* described in Ayurveda. The first line of treatment suggested for *Prameha* in Brihat-trayi is *Shodhana*<sup>6</sup>. Particularly *Vamana*( therapeutic vomiting) and *Virechana*( therapeutic purgation)<sup>7</sup> for-obese and *Brihana*<sup>8</sup> for -lean patients of *Prameha*. One of the classifications of *Prameha* according to Ayurveda, based on etiological factors is, *Santarpana Nimittaja*[ *sthula*(obese) and *balavana* (optimum body strength) ] and *Apatarpana Nimittaja*[ *krusha*(lean) and *durbala* (debilitated)]<sup>9</sup> which correlates with type2 diabetes mellitus and type1 diabetes mellitus, respectively. Thus Virechana therapy was adopted for this patient.

## CASE REPORT

A 50years old male patient, K/C/O DM since 12 yrs presented with C/O

uncontrolled diabetes besides on regular medication.

Twelve years before he had a non healing wound on his hand in spite of medications. Meanwhile, he got fainted while walking by the street. On investigations it was revealed that elevated blood sugar levels reached up to around 300mg/dl (exact report is not available). Since then he was on regular medication for Diabetes. He was given Tab Daonil 1BD and advised for diabetic diet. Despite the medication his blood sugar levels were never within normal range. It always remained within the range of 180 – 250mg/dl. All these years, patient was asymptomatic. Four years before BSL was raised above 300mg/dl fasting and 400mg/dl pp. The only sign were boils on left cheek and on the chest. A second opinion was taken from another physician about the present situation. Since then he is taking Tab Daonil 1BD, Tab Glycomet GP 1gm;1 BD, even then, BSL remained consistently high ranging in 250- 450mg/dl. It was observed that when the stress levels were high BSL also used to be on the higher side. This time physician decided to shift the patient on insulin as he was not responding to oral hypoglycaemics. The patient therefore opted for Ayurvedic treatment, if any.

## ABOUT VIRECHANA THERAPY

It is one of the Panchakarma treatments of Ayurveda, which means induced purgation for therapeutic purpose. Like in any surgery it is carried out in preoperative, operative and post operative manner. Preparatory procedure comprise of, internal medicines to facilitate proper digestion for usually four to seven days followed by internal oleation for three to seven days followed by external oleation(oil massage) and sudation which aims at bringing the vitiated disease causing doshas(basic elements) into alimentary canal. Main procedure comprise only oral medicines inducing purgation while in post procedure there is special diet regimen to follow for three to seven days.

## MANAGEMENT

- 1) Patient was described the treatment procedure in detail.
- 2) Written informed consent was taken.
- 3) *Pachan*<sup>10</sup> (internal medicines to facilitate proper digestion )- *Hingvashtak churna*<sup>11</sup> - 1gm in *Apana kala* (before food) was given with warm water for two days.
- 4) Internal oleation with *Triphala ghrita*<sup>12</sup> in increasing order for four days (oleation stopped, as symptoms of proper oleation achieved) was followed. Daily assessment

for symptoms of oleation was done. *Vatanulomana*(proper evacuation of flatus and stools), *deeptagni*(enhanced digestive function), *snigdha varchas*(oily stools), *asanhat varchas*(unformed stools), *mrudvangata*(suppleness of skin), *snigdhaangta*(oily skin), *snehodvega*(revulsion for *sneha*), *glani*(exhausted), *vimlendriyata*(enthusiasm) these are symptoms of proper oleation<sup>13</sup>, which were assessed daily during internal oleation. Oleation was discontinued as soon as oily stools were observed in patient.

5) External oleation and sudation on *vishram din* (next two days after completion of oleation, when internal oleation is not done) and on the day of *Virechana* with sesame oil (16/4, 17/4 and 18/4/2014)

6) On the day of *Virechana* pulse, BP, and systemic examination was done along with Ashtavidha Pariksha. Pulse – 80/min, BP – 120/80mmof Hg, RS – AEBE clear, CVS – S1S2 normal, stool, urine – normal, tongue – niraam(uncoated).

7) *Virechana* drug - *Abhayadi modak*<sup>14</sup> 500mg with decoction of *Triphala* 150ml was given on empty stomach.

8) Patient was asked to take rest till *virechana vegas*(purgation frequency) starts.

9) *Virechana vegas* were assessed subjectively. Total 16 vegas occurred in which last stools were sticky indicating *kaphanta Virechana*<sup>15</sup>.

10) Patient's pulse, BP, was recorded during *Virechana* which was normal throughout the procedure.

11) *Sansarjana krama*(special diet regimen)<sup>16</sup> was advised for five days.

12) During internal oleation and till *Virechana* previous medicines was asked to take in the evening only. During *Sansarjana karma*, pervious medicines were stopped completely.

13) After *Sansarjana karma*, only *Dhatri-Nisha vati*(proprietary medicine of in-house pharmacy of college, containing, *Aamalki* and *Haridra churna* processed in its decoction) was started along with previous medicines.

The data for above is provided in **Table 1**

## DISCUSSION

Diabetes mellitus is a metabolic cum vascular syndrome of multiple aetiologies characterized by chronic hyperglycemia with disturbances of carbohydrate, protein, fat metabolism resulting from defects in insulin secretion, insulin action or both. This disorder is frequently associated with long

term damage which can lead to failure of organs like eyes, kidneys, nerves, heart and blood vessels. Goals for treatment according to ICMR guidelines for management of type 2 diabetes- 2005 aimed at prevention of these macro and micro vascular complications. This can be achieved by meticulous control of diabetes. Patients of uncontrolled diabetes are most likely to develop complications.

*Virechana* therapy, one of the purification therapies restores the *Agni* (impaired metabolism) by acting at cellular level, there by correcting insulin secretion and insulin action. In practice these Shodhana therapies viz *Vamana* and *Virechana* are often

adopted to treat type2 Diabetes Mellitus. In uncontrolled diabetes also it proved effective when conventional therapy fall short to gain control over it.

*Vamana* followed by *Virechana* may have more significant efficacy in the management of uncontrolled type2 diabetes. Also if these treatments are followed systematically every year, micro as well as macro vascular complications can also be reduced to remarkable extent.

This study if carried out on large sample size can come out with some concrete conclusion with the help of appropriate statistics (**Table 2**).

**Table 1** Internal Oleation Chart

Day	Date	Dose of Sneha	Time of consumption of Sneha	Time of Hunger	Jaran Kala	Symptoms
1	12/04/2014	50ml	6.30am	5.30pm	11hrs	<i>Asanhata varchas</i>
2	13/04/2014	80ml	6.45am	11.30am	5hrs	<i>Vatanulomana, Deeptagni, Asanhata varchas</i>
3	14/04/2014	150ml	6.45am	2.30pm	8hrs	<i>Vatanulomana, Deeptagni, Asanhata varchas</i>
4	15/04/2014	180ml	6.30am	5.30pm	11hrs	<i>Vatanulomana, Deeptagni, Asanhata varchas, Snigdha varchas, Mardava</i>

**Table 2** Observations and Result

Investigation	8/04/2014 (Before <i>Virechana</i> )	24/04/2014 (After <i>Sansarjana</i> <i>krama</i> of	16/05/2014 (After one month of <i>Virechana</i> )	18/8/2014 (After four months of <i>Virechana</i> )	10/09/2014 (After quarter to fivemonths of <i>Virechana</i> )

	Virechana)			
<b>Sr. Cholesterol</b>	122	152		
<b>Sr. HDL cholesterol</b>	37	63		
<b>Sr. Triglyceride</b>	83	89		
<b>VLDL cholesterol</b>	17	20		
<b>LDL cholesterol</b>	70	69		
<b>BSL fasting</b>	240	190	153	169
<b>BSL pp</b>	431	265	180	228
<b>HbA1</b>		10.9%		9.2%
<b>HbA1C</b>		8.4%		6.97%
<b>MBG</b>		215		153

## CONCLUSION

After *Virechana* therapy, blood sugar levels both fasting and pp were normal. There was significant reduction in Glycated haemoglobin which indicates its long term effect. *Virechana* also helped to increase HDL levels. Thus it can be concluded that uncontrolled diabetes can be managed with the help of *Virechana* therapy effectively as compared to conventional therapy.

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