



## A Novel Approach to the Management of Obesity, Economically For Multiple Diseases Prevention

Vinod C Tawar\*

*Family physician and Clinical researcher Clover hill medical clinic, surrey, Canada*

**Received Date:** 28 May, 2019; **Accepted Date:** 03 June, 2019; **Published Date:** 12 June, 2019

\***Corresponding author:** Vinod C Tawar, Family physician and Clinical researcher Clover hill medical clinic, surrey, b.c. Canada. Email: [tawar.vinod@yahoo.com](mailto:tawar.vinod@yahoo.com)

### Abstract

There is a well-recognized fact that obesity is a causative factor to many life-threatening diseases. In general, lifestyle, family history, inactivity, medications etc. Are known contributors however, irrespective of contributors losing weight has been a challenging issue i.e. cost, motivation, compliance effectiveness has been impractical for many suffering from obesity leads to diabetes, ischemic heart disease, de-ression, arthritis , all-cause mortality, hypertension, hyperlipidemia, stroke, gallbladder disease, obstructive sleep apnea, asthma, pancreatic and reproductive organs related cancers.

Our current research was conducted over 12-16 weeks and included 38 patients. A review of their medical history revealed poor heating habits, depression, diabetes, hypertension and inactivity to least a few. The method consisted of training patients to self-inject subcutaneously over abdominal surface on lateral flanks alternatively every 3 days, under supervision until they were effectively injecting vitamin b12 0.5cc and pyridoxine hydrochloride each and on subsequent visit they would to other flank on a similar area. Once trained the patients were seen on a weekly basis. A pre-treatment lab assessment was done and at the conclusion of treatment, however they were weighed at each visit. Additional measures included calorie-wise diet and light aerobic exercises 20-30 minutes 3 times per week.

### Past Investigations

Govt. of Canada in 1994 had published an article about the obesity and its impact on economy and health [1]. Subsequently in 2007, an algorithm of the management of obesity was outlined [2]. Next Hainer, et al. In 2008, discussed the role of obesity in diabetes care supplement [3] in 2010 , cdc guidelines emphasized the significance of dietary control in preventing obesity [4] next , executive summary of guidelines included management of overweight and obesity in adults in 2013 [5]. Subsequently in 2013, a publication highlighted on the issue of health consequences of being overweight in 2013 [6]. On a following publication in 2014, guidelines for the management of overweight and obesity in adults were stated [7]. European guidelines in 2015 included for obesity management in adults [8] Austric, et al. in 2018 highlighted on changes in food rewards considerations during weight management aspect [9]. Next, Drummen M, et al. Studied dietary protein and energy balance in relation to obesity and co-morbidity [10] finally in 2018, o'neil p.m. et al. did a comparative study of semaglutide and liraglutide 7 placebo in terms of efficacy and safety. The end results showed semaglutide in combination with physical activity, dietary and activity counselling showed more effectiveness and better tolerance [11].

**Method**

**Patients Selection**

A common issue in majority of the patients was having diabetes and of Indiaorigin, attributed to surrounding population. The distribution of male to female ratio was approximately 1:5, in the age category of 30 to 72 in males and females from 22 to 58. Their past treatments contributing or absence of included hypothyroidism in activity, oa , dmm , depression,, chronic pain , gad , fatigue , , obesity for unidentified factors, , ischemic heart disease, soft tissue injuries, etc.. Other factors contributing to obesity were life styles, family history, eating disorders and drugs (glyburide, phenothiazines, gliclazide and insulin.).

**Results Enclosed in Tables**

No.	INIT	AGE	DUR. DM	TX PERIOD
1	SM	55	2 YEARS	7 DAYS
2	INM	85	10 DAYS	10 DAYS
3	J. K	62	5 MONTHS	3 DAYS
4	SK	35	3 YEARS	7 DAYS
5	H. V	76	2 YEARS	2 MONTHS
6	LY	57	PVD 7 YEARS	2 MONTHS
7	CC	59	4 YEARS	2 MONTHS
8	SC	54	2 YEARS	1 MONTH
9	EH	52	2 YEARS	1 MONTH
10	JL	76	10 YEARS	3 MONTHS
11	NN	65	8 YEARS	1 MONTH
12	JN	60	3 YEARS	2 WEEKS
13	DG	76	10 YEARS	2 MONTHS
14	YH	62	3 YEARS	2 MONTHS
15	FH	57	8 YEARS	3 MONTHS
16	WS	89	15 YEARS	2 MONTHS
17	AR	52	10 YEARS	4 MONTHS
18	AM	57	12 YEARS	6 MONTHS
19	VT	75	20 YEARS	4 MONTHS
20	PT	69	4 YEARS	1 MONTH
21	KL	45	6 YEARS	1 MONTH
22	SS	62	7 YEARS	3 MONTHS
23	LK	59	10 YEARS	2 MONTHS
24	GP	52	4 YEARS	1 MONTH
25	KS	57	20 YEARS	3 MONTHS
26	HA	62	5 YEARS	4 MONTHS

**Notes:**

- Number of Patients: 26
- Most- Diabetic Patients
- A few- Smokers
- One- Accidental Freezing
- Age 35-89 Years
- Duration DM 2- 20
- Duration TX 3D – 3MOS
- Relapse.

No.	INIT	AGE	SEX	Pre WT	Past HX	Post WT	DUR.TX	Changes BMI	Outcome
1	JL	32	F	178	HYPOTHY	161	16	4	FERTILITY
2	KL	37	M	210	DM	200	12	1	DEPC.AIC
3	ST	52	F	162	A	148	16	3	A
4	EH	49	F	172	OA	165	14	3	DEC.PAIN
5	SD	58	F	180	CP	126	16	4	DEC.PAIN
6	DA	72	M	190	DM	180	12	3	DEC.AIC
7	AC	54	F	172	DEP.	168	12	2	MOT.
8	SC	58	F	155	CP	142	12	2	DEC.PAIN
9	SS	88	F	170	OA	151	16	3	DEC.PAIN
10	AG	30	M	180	GAD	163	16	4	MOT.
11	BP	32	F	172	FAT	160	12	1	MOT.
12	RC	22	F	164	FAT	141	12	3	MOT.
13	VV	30	F	182	OBE	162	16	4	MOT.
14	CS	54	F	189	IHD	175	12	3	A
15	BA	42	M	170	DM	159	16	2	DEC.AIC
16	VK	44	F	168	STIGAD	155	12	3	A, DEC.PAIN
17	VJ	24	F	150	DM	135	12	3	DEC.PAIN
18	SR	49	F	155	DM	145	12	1	DEC.PAIN
19	BD	62	F	200	DM	190	12	1	DEC.PAIN
20	JS	49	F	201	DM	185	12	3	DEC.PAIN
21	SU	60	F	210	DM	190	10	3	MOT.
22	GL	39	F	176	OBE	175	12	3	DEC.AIC MOT
23	PC	41	M	195	DM	172	12	3	DEC.AIC MOT
24	PS	26	M	200	FAT	188	10	4	MOT.
25	SM	47	F	182	ETH	176	08	1	ETH,GAD
26	JU	49	F	162	FAT	150	12	2	MOT.
27	TI	55	F	170	OA	148	16	3	DEC.PAIN
28	MR	58	F	172	FAT	149	16	2	MOT.
29	KN	31	F	165	DED.	151	12	2	DEC.PAIN
30	AR	52	F	186	DM	172	12	2	DEC.AIC
31	GG	31	F	172	FAT	164	12	2	MOT.
32	SA	52	F	172	DM	158	16	2	DEC.AIC
33	AH	49	F	176	DM	152	14	2	DEC.PAIN
34	SD	36	F	168	DM	158	10	2	MOT.
35	KS	40	F	165	DM	143	10	3	DEC.AIC
36	SD	52	F	168	FAT	156	08	2	MOT.

**Abbreviations:**

MOT: Motivation  
 PREG: Pregnancy  
 A: Increased/Active  
 FAT: Fatigue

Results at the conclusion of study indicated highest compliance, motivation, and a consistent weight loss of 8-10 pounds / month. The lost weight mostly remained sustained. Most importantly, the approach remained most economical (30-40 dollars) for a 12-14 week period. Prior to participation in the study some patients had spent thousands of dollars at commercial facilities with rigid controls and had regained the weight drastically at the rate it was lost. This was a main reason of designing the study. A 56 year female patient had lost 35 pounds resulting in a BMI of normal value. Her visit after 3 years showed a sustained weight loss. The parameters considered in the documentation of results are age, sex, pre tx wt. past hx, post tx weight, duration of tx, changes in bmi, and outcome of the research. The participants did not experience any adverse reactions from vitamin injections.

### **Factors Affecting Weight Loss**

- Compliance, motivation
- Diet- calories control.
- Pre-morbid illnesses

### **Discussion**

The duration of study was 16 weeks. The study included 36 participants. A majority of participants were from India with history of having diabetes, in age group 24 to 88. Illnesses other than diabetes were hypothyroidism, chronic pain, osteo-arthritis, fatigue, obesity, fatigue, generalized anxiety disorder and ischemic heart disease. The duration of participation included 8 to 16 weeks. The resulting decrease in bmi included 1 to 4 improving fertility, decreasing severity of pain, increasing motivation towards fitness and decreasing severity of diabetes.

In summary, the weight loss approach being an economical option with pro-active patient's involvement appears to be a valuable, feasible process of multiple diseases prevention in Canada overall cost of medications was approx. 40 dollars/ 3 months.

### **References**

1. Govt. of Canada publ. "obesity in Canada- health and economic implications impact " 1994
2. "ALGORITHM OF THE MGT. OF OBESITY" in cmajapril 2007
3. "Diabetic Care Suppl," 2:5269-77:31, 2008.
4. "cdc guidelines in [http // , www.healthgov. /dietary guidelines](http://www.healthgov./dietary%20guidelines). 2010.
5. American College of Cardiology/American Heart Association Task Force on Practice Guidelines, Obesity Expert Panel (2014) Executive summary: Guidelines (2013) for the management of overweight and obesity in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Obesity Society published by the Obesity Society and American College of Cardiology/American Heart Association Task Force on Practice Guidelines. Based on a systematic review from the The Obesity Expert Panel, 2013. Obesity (Silver Spring) 2: S5-39.
6. "Health Consequences of Being Overweight" march 2012, who publ.
7. "Michael Jensen in "exec. Summary: guidelines for the management of overweight and obesity in adults in adults in obesity" a research journal. july 2014.
8. Yumuk V, Tsigos C, Fried M, Schindler K, Busetto L, et al. (2015) European Guidelines for Obesity Management in Adults. Obes Facts 6: 402-424.
9. Oustric P, Gibbons C, Beaulieu K, Blundell J, Finlayson G. Changes in food reward during weight management interventions - a systematic review. Obes Rev 12: 1642-1658.
10. Drummen M, Tischmann L, Gatta-Cherifi B, Adam T, Westerterp-Plantenga M (2018) Dietary Protein and Energy Balance in Relation to Obesity and Co-morbidities. Front Endocrinol (Lausanne) 6: 9:443
11. O'Neil PM, Birkenfeld AL, McGowan B, Mosenzon O, Pedersen SD, et al. (2018) Efficacy and safety of semaglutide compared with liraglutide and placebo for weight loss in patients with obesity: a randomised, double-blind, placebo and active controlled, dose-ranging, phase 2 trial. Lancet 392: 637-649.

**Citation:** Tawar VC (2019) A Novel Approach to the Management of Obesity, Economically For Multiple Diseases Prevention. Adv Endo and Dia. AEAD- 107.