

A Comparative Study on Obesity Using *Fucus vesiculosus* with and without Advised Dietary Patterns

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ABSTRACT

Introduction: Present lifestyle with less physical activity and more mental strain leads to year's disease and disorders different from known earlier. These are the so-called diseases of civilization which have affected urbanized, industrialized societies over the past 60 years.

Need of the study: Prevalence of obesity is increasing rapidly throughout most of the industrialized world. Based on statistics from the World Health Organization, overweight and obesity may soon replace more traditional public health concerns such as under-nutrition and infectious diseases as the most significant contributors to ill health.

Objectives: To study Obesity from different sources. A comparative study on obesity using *Fucus vesiculosus* with and without advised dietary patterns.

Materials and methods: A Prospective study was carried out during period of 6 months in 30 patients with obesity. 30 cases were selected by simple random sampling technique. Selected 30 cases were divided in two groups (Group A and Group B) randomly. Each group comprises 15 cases. Group A received *Fucus vesiculosus* as therapeutic medicine. Group B advice diet.

Results: At the end of the study it is observed that result obtain from medicine prescribed on therapeutic value for obesity that is focus vesiculosus is less than the result obtained by medicine focus vesiculosus along with diet control and exercise.

Conclusion: For obesity, the homoeopathic management is mainly of two types one is therapeutic way of prescription and other advice dietary both ways are considered for the study. This study concludes that *fucus vesiculosus* is less effective- than diet control and exercise.

Keywords: Obesity, *Fucus Vesiculosus*, Advised Dietary Patterns, Homoeopathy

INTRODUCTION

Present lifestyle with less physical activity and more mental strain leads to disease and disorders different from known earlier. These are the so-called diseases of civilization which have affected urbanized, industrialized societies over the past 60 years.

We may conclude that Obesity is an expression of internal sickness of man and has to be treated holistically with appropriate homoeopathic medicine.

According to 6th edition of Organon of medicine by Dr Samuel Hahnemann aphorism 261- The most appropriate regimen during the employment of medicine in chronic disease consists in the removal of such obstacles to recovery, and in supplying where necessary the reverse: innocent moral and intellectual recreation, active exercise in the open air in almost all kinds of weather (daily walks, slight manual labor), suitable, nutritious, non-medicinal food and drink.

Therefore, it is necessary to maintain diet and increase physical activity along with medication as obesity is caused by the ingestion of greater amounts of food than can be used by the body for energy. The homoeopathic Materia medica was based on individual study of drugs. Now the number of medicine in homoeopathic Materia medica is more than 3500 but there are various remedies which are partially proved or having only therapeutic values and wide range of remedies which are well proved with defined constitution.

Fucus vesiculosus in obesity:

Fucus vesiculosus is seaweed called as bladder wrack. Fucus vesiculosus is used as homoeopathy medicine for treatment of obesity. But in our literature survey, we found no substantial pharmacological evidence to prove its safety and efficacy. So, we have taken up this drug and evaluated it on diet and fucus vesiculosus on healthy human being.

- William Boericke - It is a fat reducer, rheumatism and gout associated with obesity, sterility of obese people. A remedy for obesity and non-toxic goiter; also, exophthalmic. Digestion is furthered and flatulence diminished. Obstinate constipation.
- Clark -The symptoms have been obtained from patients taking the medicine for the reduction of obesity. The rapidity of digestion is increased and flatulence diminished. Goiter has been cured with it in teaspoonful doses of the tincture given two or three times a day.

SOURCE DETAILS: - It's found on coasts of the North Sea, the western Baltic Sea, and Atlantic and Pacific oceans.

BACKGROUND: Used by Native Americans for a range of complaints from rheumatoid arthritis to hemorrhoids, this plant is highly potent and toxic in excess.

REPARATION: The fresh root is unearthed during the fall, finely chopped, and

macerated in alcohol. **COMMON NAMES:** bladder wrack, large alga.

KINGDOM: Plant

FAMILY: Fucaceae

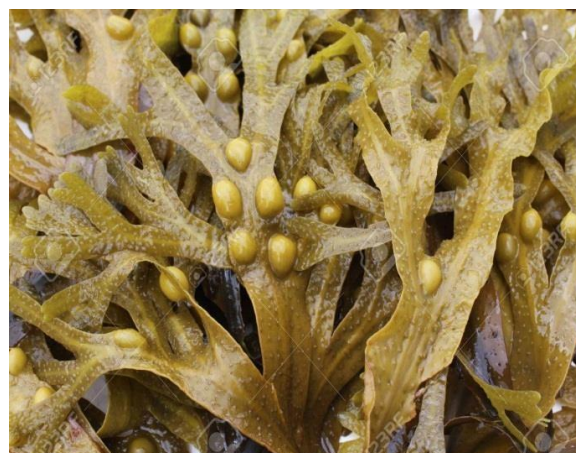


Figure 1: Image of fucus vesiculosus plant

Diet advised

According to BMR, calories of food are advice and every 15 days diet has been changed and calculated BMR every 15 days, accordingly changes of weight and bmr. Diet calories are increased and decreased 200-300 calories from bmr. Diets are vegetarian and non-vegetarian. Especially low carb diet was given.

MATERIALS AND METHODS

- *Study setting:* The study was conducted at College OPD
- *Study duration:* 3 MONTHS
- *Study design (type of study):* Prospective, cross sectional, before-after study.
- *Sample size & selection of sample:* 30 cases were selected by simple random sampling technique. Selected 30 cases were divided in two groups (Group A and Group B) randomly. Each group comprises 15 cases. Group A received fucus vesiculosus as therapeutic medicine. Group B received diet.

Inclusion Criteria:

- Patients between the age group of 18-50 years, of both the sexes, and different socio- economic status are included.

- Patients having BMI more than 30 are included.

Exclusion Criteria:

- Obese patients having age below 18 and above 50.
- Obese patients who have BMI less than 30.
- *Selection of tools:* Questionnaire, Body Composition Monitor with Scale and diet chart.
- *Medication:* Mother Tincture and Repetition
- Questionnaire testing, measurement of parameter like BMI, weight according to age and sex. Results obtained on the basis of BMI compared and most efficient medicine selected. Parameters used are: Change in clinical findings like BMI, change in Symptoms and Signs.
- Selected by simple random sampling technique. Selected 30 cases were divided in two groups (Group A and Group B) randomly. Each group comprises 15 cases. Group A received fucus pediculosis as therapeutic medicine. Group B received diet.
- Improved-BMI relatively decrease by 5 kg/m² or more
- Partially improved-BMI relatively decrease by 1-4 kg/m² –
- Not improved- BMI status quo or increase

RESULT

At the end of the study it is observed that result obtain from medicine prescribed on therapeutic value for obesity that is fucus pediculosis is less than the result diet control and exercise.

At the end of the study it is observed that result obtain from medicine prescribed on therapeutic value for obesity that is fucus pediculosis is less than the result diet control and exercise. Effectiveness of treatment was assessed on the basis of clinical improvement and weight loss. A detailed description of the data collection for the study is presented using tables and

charts. Statistical analysis has been done through - student t- paired test for finding the result and objective of the study.

Distribution of cases according to BMI before and after treatment of fucus vesiculosus:

Analysis of BMI after treatment of fucus vesiculosus

Case No.	Before treatment	After treatment
1	34.77	32.47
2	34.27	32.15
3	45.2	42.49
4	30.2	29.52
5	30.66	28.37
6	51.52	47.87
7	30.73	26.4
8	38.2	34.31
9	35.17	32.05
10	30.78	28.93
11	32.18	28.39
12	46.68	38.76
13	32.42	28.4
14	33.86	28.31
15	30.74	27.94

Distribution of cases according to BMI before and after treatment of diet:

Analysis of BMI after treatment of diet

Case No.	Before treatment	After treatment
16	41.58	36.85
17	36.78	33.75
18	30.13	29.37
19	34.05	31.24
20	30.41	30
21	31.98	27.93
22	32	26.40
23	34.20	27.80
24	30.40	26.40
25	32	29.1
26	31	28.10
27	34.28	30.59
28	35.21	32.39
29	33.22	30.08
30	34.62	30.2

Sex distribution

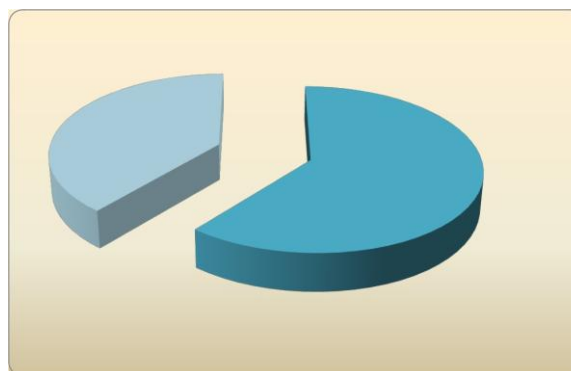


Figure 2: Male- 39%; Female- 61%

In this study, 11 were male and 19 were female with male to female ratio of 3:2.

DISCUSSION

The current study was conducted in patients who reported to the outpatient department of the college OPD and camps. A total number of 30 cases were taken randomly for the study. For the assessment of the clinical status before and after the treatment the score was used which is mentioned above. The score before and after the treatment was considered and t test was applied which evaluate highly significance of both fucus pediculosus and Diet hence fucus vesiculosus and diet are efficient in management of obesity.

In this study maximum importance is given to fucus vesiculosus and Diet. Almost all cases were treated with fucus vesiculosus and Diet. Among that 15 cases were given fucus vesiculosus and 15 cases were given with fucus vesiculosus. Out of 30 cases taken for the study, 5 cases showed marked improvement, 22 cases showed partial improvement and 3 cases were not improved.

From the analysis of the above results obtained it is obvious that the fucus vesiculosus and diets are effective in the treatment of obesity.

On the basis of clinical improvement of the patients the outcome reported maximally under moderate / partially improved 16%(53%). 10 cases, 33% were reported good improvement and 4 cases, 13% were reported poor improvement.

CONCLUSION

For obesity, the homoeopathic management is mainly of two types one is the therapeutic way of prescription and advised diet, both ways are considered for the study. This study concludes that fucus

vesiculosus is less effective than diet control and exercise.

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