



Review Article

UNDERSTAND THE CONCEPT OF *NIDANARTHAKARA ROGA* W.S.R. TO OBESITY

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ABSTRACT

Ayurveda is a holistic science of life described many fundamental principles related to the Dasha, *Dushya*, *Srotasa*, *Vyadhi utpatti* and *Vyadhi cikitsa* etc. Ayurveda furthermore presented many aspects related to the prevention of *Vyadhi* and avoidance of *Nidanas* in terms of *Nidana parivarjana*. *Nidana* plays a key role in manifestation of any diseases. Sometime disease itself acts as *Nidana* and plays a key role in the onset of another disease. This concept is undertaken by *Acarya Caraka* under the title *Nidanarthakara roga* (a disease itself become causative factor for some other disease). The disease manifest first is termed as primary disease, while disease manifest as consequence of primary disease termed as secondary disease. In the today's time, it is crucial to know the *Nidanarthakaratva* of any disease. The presenting era is more challenging for medical sciences on account of emerging of various lifestyle diseases. Obesity is one among them. Unhealthy diet habit, sedentary lifestyles are the various *Nidanas* for Obesity. Now days obesity is burning issue for society due its critical consequences. Sometime obesity itself act as *Nidana* for various diseases e.g. hypertension, diabetes mellitus, infertility, heart diseases, some form of malignancies etc. To prevent these consequences, we have thorough knowledge of the obesity and it's *Nidanarthakaratva*. Here an attempt made to enlighten the knowledge of *Nidanarthakara vyadhi* and to elaborate the *Nidanarthakaratva* of obesity.

INTRODUCTION

Ayurveda is a holistic science of life described many fundamental principles related to the *Dasha*, *Dushya*, *Srotasa*, *Vyadhi utpatti* and *Vyadhi cikitsa* etc. Ayurveda furthermore presented many aspects related to the prevention of *Vyadhi* as well as avoidance of *Nidanas* in terms of *Nidana parivarjana*. *Nidana* plays a key role in manifestation of any diseases. Sometime disease itself acts as *Nidana* and plays a key role in the onset of another disease. This concept is undertaken by *Acarya Caraka* under the title *Nidanarthakara roga*^[1] (a disease itself become causative factor for some other disease).

'Nidanarthakaro rogo rogasya api upalabhyate|' (Ch. Ni. 8/16)

The presenting era is more challenging for medical sciences on account of emerging of various lifestyle diseases. Obesity is one among them. Unhealthy diet habit, sedentary lifestyle are the various *Nidanas* of Obesity. Now a day's obesity is burning issue for society due its critical consequences. Sometime obesity itself act as *Nidana* for various diseases e.g. Hypertension, Diabetes mellitus, Infertility, Heart diseases, some form of malignancies etc. To prevent these consequences, we have thorough knowledge of the obesity and it's *Nidanarthakaratva*. Here an attempt made to enlighten the knowledge of *Nidanarthakara vyadhi* and to elaborate the *Nidanarthakaratva* of Obesity.

AIMS AND OBJECTIVES

1. To study the concept of *Nidanarthakara Roga* (a disease itself become etiology for another disease).
2. To study the *Nidanarthakaratva* of Obesity in the present era.

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MATERIALS AND METHODS

This study is based on the literature review. Material has been collected from Ayurvedic texts e.g. *Caraka samhita, Sushruta samhita, Ashtanga hrudaya, Madhava Nidana, Bhavapraksha* with different commentaries, Research articles, books and national research databases.

RESULT

Concept of Nidanarthakara Vyadhi

Nidanarthakarah Vyadhijanakah iti arthah ten Vyadhina Vyadhnte || (Cakrapani)

As per *Acarya Cakrapani*, *Nidanarthakara Vyadhi* means one disease originates (becomes parents for) another diseases.

The disease manifest first is termed as *Svatantra vyadhi* (primary disease), while diseases manifest as consequence of primary disease termed as *Paratantra vyadhi* (secondary disease). In the today's time, it is crucial to know the *Nidanarthakaratva* of any disease. This *Nidanarthakaratva* classified in the 2 ways. First is *Ekarthakari vyadhi* and second one is *Ubhayarthakari vyadhi*.

'Te poorva kevala rogah pascad hetvarthakarinah | Ubhayarthakara drashtah tathaiva ekarthakarinah ||' (Ch. Ni. 8/20)

Initially, it acts as independent disease (*Svatantra vyadhi*). Later serves as causative factor for the development of another disease (*Paratantra vyadhi*).

Concept of Ekarthakari vyadhi and Ubhayarthakari vyadhi

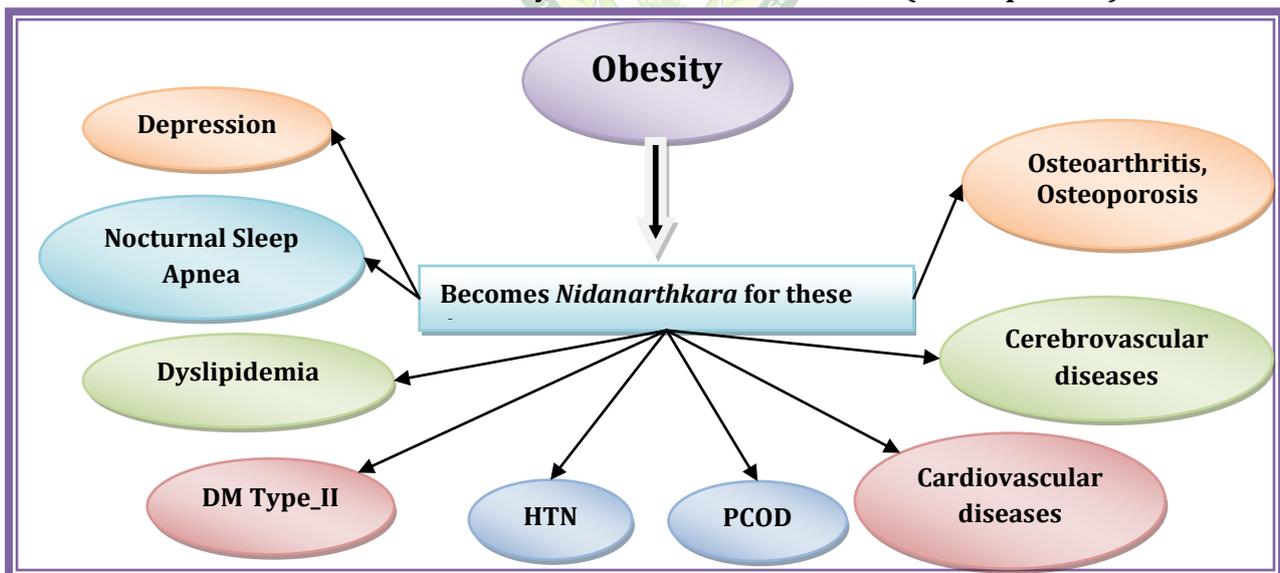
Primary disease is the *Svatantra (Pradhana) vyadhi* which is manifested independently by its *Nidanas* and sometime later it may cause a *Paratantra vyadhi* (secondary disease exclusively depend on primary disease), in other word *Svatantra vyadhi* acts as *Nidana* (etiological factors) for another disease. After manifesting the secondary disease, if Primary disease may not continue with secondary disease, it's called as *Ekarthakari nidanarthakara vyadhi* or if primary disease may continue with secondary diseases it is called as *Ubhayarthakari nidanarthakara vyadhi*.

In *Nidanarthakara vyadhi* (a disease itself become causative factor for some other disease), it is important to know that disease can produce another disease only when there is a presence of favorable endogenous or exogenous factors like similarity in *Dosha, Dushya, Prakruti, Rtu* etc (supporting/conductive factor).

Obesity

Obesity is defined as a state of increased body weight, caused by adipose tissue accumulation that is of sufficient magnitude to produce adverse health effects.^[2] Excess adiposity (obesity) and excess body weight are associated with increased incidence of several of the most important diseases of humans, including type DM type 2, dyslipidemia, cardiovascular disease, hypertension and cancers.^[3]

Chart No. 1 Shows Obesity and its Nidanarthakartva (Consequences)



Initially obesity gradually manifested by their independent etiology e.g., faulty food habits and lifestyles etc. If it is not treated and person will continue to indulge the *Nidanas*, it will become deep rooted and now it started to grow in full fledge. It simply means, it has started to manifest other diseases. Most common diseases which are offspring of obesity are DM type 2, HTN, heart diseases, bones and joint

diseases, infertility, depression and some forms of cancers etc.

Concept of *Nidanarthakara vyadhi* can help in diagnosis and treatment as well as in prevention of the disease. Here is some medical evidence of *Nidanarthakaratva* obesity in manifestation of other diseases.

Obesity and its Nidanarthakartva**Obesity being Nidana in Diabetes Mellitus type 2**

Body mass index has a strong relationship to Diabetes and Insulin resistance. [4] The amount of non-esterified fatty acids, glycerol, hormones, cytokines, pro inflammatory markers, and other substances that are involved in the development of insulin resistance which are increased in obese person. The development of diabetes becomes more inevitable if the failure of β -islet cells of the pancreas is accompanied by insulin resistance. Weight gain and body mass are central to the formation and rising incidence type 2 Diabetes mellitus. [5]

Obesity being as Nidana in Hypertension

Excess weight gain, especially when associated with increased visceral adiposity, is a major cause of hypertension, accounting for 65% to 75% of the risk for human primary (essential) hypertension. [6] Obesity is a major risk for essential hypertension and other morbidity that contribute to the development of kidney disease because it mainly increases tubular re-absorption to impair pressure natriuresis and cause blood volume expansion via the activation of the SNS (Sympathetic nervous system) and the RAAS (Renin Angiotensin Aldosterone System). [7]

Obesity being Nidana in Cardiovascular Diseases

Obesity is associated with an increased risk of developing cardiovascular disease (CVD), particularly heart failure (HF) and coronary heart disease (CHD). The mechanisms through which obesity increases heart diseases, risk involve changes in body composition that can affect hemodynamics and alters heart structure. Pro-inflammatory cytokines produced by the adipose tissue itself which can induce cardiac dysfunction and can promote the formation of atherosclerotic plaques result in cardiovascular diseases. [8]

Obesity being Nidana in Depression

Several researches viz. systemic review and Meta analysis have been done to prove the relation between Obesity and Depression. Research identifies that 'Tricyclic' anti-depressant medications (e.g. amitriptyline) as particularly likely to cause weight gain. However, a recent review finds that for most of the antidepressants the effect on subsequent weight change is idiopathic. Nevertheless, it is possible that some of the relationship observed may be an artifact of antidepressant use. [9]

Obesity being Nidan in Infertility

Obesity has detrimental influences on all systems, including reproductive health. The prevalence of obesity in infertility is high. [10] Overweight women have a higher incidence of menstrual dysfunction and anovulation. The risk of infertility, conception rates, miscarriage rates, and pregnancy complications are

increased in obese women. [11] Study shows that weight loss has beneficial effects on the reproductive outcomes in these patients.

CONCLUSION

Herewith we have discussed an important Ayurvedic fundamental principle 'Nidanarthakara Roga' with special reference to Nidanarthakarartva of obesity. Today's in this present era, it is need to elaborate our ancient principles in the light of modern perspective. The prevalence of obesity and overweight are increasing and has become an epidemic worldwide now days. Obesity independently existed as disease and it also acts as etiology for several diseases. If we understand thoroughly the principle of Nidanarthakarartva, we definitely prevent the victims (other disease rather than obesity) of obesity by the preventing as well as managing the obesity to ceases the further consequences.

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