

OBESITY IN CHILDHOOD: A SERIOUS ISSUE IN KAUMARBHRITYA

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ABSTRACT

Children are backbone of our society, so they have to be fit and fine for bright future. Children's growth rate varies at different times during their development which makes it difficult to tell if they are overweight. A chubby child obviously attracts many attentions, because of this reason parents often tends to overfeed their children out of affection and fail to notice that their toddler who was once chubby and adorable hasn't lost his baby fat and growing up obese. With continuous change in lifestyle and dietary habits, child has become the victim of many disease and obesity (*Sthaulya*) is one of them. The body weight of our babies is putting pressure on their "Cuteness", their "happiness", their "emotions" and their "being". Because of high

cholesterol level in children further leads to hyperlipidemia, Diabetes like complications in future life of obese child. Due to this reason obesity has become a serious issue in *Kaumarbhritya*. In *Ayurveda*, *Aacharya Charaka* described *Sthaulya* in *Ashtanindit Adhyay* and described *Karshan Chikitsa* in form of *Guru Aparparpan* to reduce obesity.^[1] This disease is supposed to be a gift of modern life style and it becomes ground for so many diseases. *Yoga* types explained in *Ayurveda* like *Asanas*, *Pranayama*, meditation and relaxation techniques are helpful for weight loss, reducing body fat and weight management.

KEYWORDS: *Sthaulya*, *Karshan*, *Guru Aparparpan*, *Yoga*.

INTRODUCTION

Children's growth rate varies at different times during their development which makes it difficult to rule out if they are overweight or not. Parents often tend to overfeed their children

out of affection and fail to notice that their toddler who was once chubby and adorable hasn't lost his baby fat and growing up obese.

Parents are responsible for helping children to grow physically, intellectually, emotionally and spiritually. In present condition, both parents are working to earn the luxurious life, so the kids are left with the food packets at home with television to see some "de-shaped" cartoons resulting in the reduction of healthy nutritious diet and also reducing their body activity. With day to day changing life style children prefers to play with electronic devices like computer, mobiles etc. rather playing outside.

Sthaulya has been described in previous and oldest records since vedic period. The word *Sthaulya* itself indicate the nature of disease i.e. the disease with heaviness and bulkiness in body. In Ayurveda, there is no direct reference like hyperlipidemia but *Acharya Charaka* has mentioned the knowledge of *Sthaulya Roga* (obesity) in the context of *Astonindit purusha* as well as prodromal features of *Prameha Roga*. *Dinacharya* explained in various *Samhitas* is not followed by peoples nowadays. If parents are not following *Dinacharya* how could they teach their children children to follow it. This is the major reason behind the increase in rate of obesity. There is need to told people importance of *Dinacharya palana* in day to day life.

Measure of Obesity^[2]

- BMI is a good indicator of obesity
- BMI(Body Mass Index)- $BMI = \frac{\text{Weight in kg}}{(\text{height in meter})^2}$
- Normal range of BMI in adults is between 18-25 while in children the corresponding figures may be 15-22.
- For children(BMI ranges)- Overweight- >22
Obesity- >25

Moderate malnutrition- <15 Severe malnutrition- <13

Classification of Obesity^[3]

Obesity is divided into 2 groups

- 1) Constitutional
- 2) Pathological

Comparison of constitutional and pathological obesity

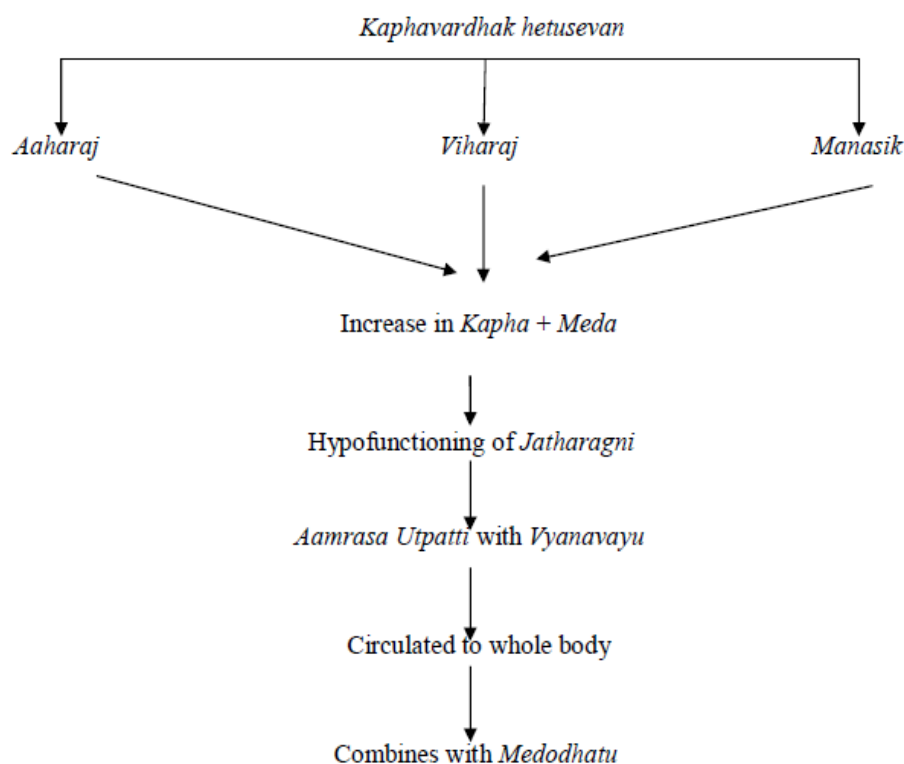
| Feature | Constitutinal | Pathological |
|--------------|---------------|-----------------|
| Distribution | Generalized | Usually central |
| Growth | Accelerated | Retarded |
| Bone age | Advanced | Retarded |
| Dysmorphism | Absent | May be present |

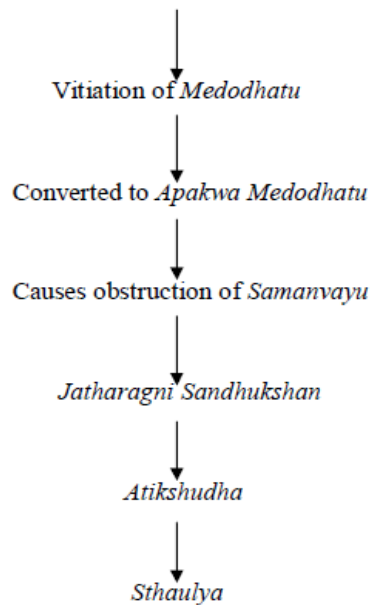
Causes of Obesity

With day to day changing lifestyle, child prefers to play with electronic devices like computer, mobiles etc. rather playing outside. In present era, both parents are working to earn the luxurious life style, so the kids are left with food packets at home with television to see “deshaped cartoons” resulting in reduction of healthy nutritious diet and also reducing their body activity. Because of this reasons children used to take Diwaswap after taking meal in afternoon, which is major reason of causing obesity. Because of this *Kaphavardhak Aaharaj*, *Viharaj* and *Manasik hetu* further leads to obesity (*Sthaulya*).^[4]

Samprapti of Sthaulya^[4]

Medasaaavrutmargatvad Vayu Koshthe Visheshtah | Charan Sandhukshayanti Agnim Aaharam Shoshayati Api || Tasmata sa Shighram Jarayati Aaharam ch Ati Kankshati | Vikaranshch Ashnute Ghoran Kanshchit Kal Vyatikramat || Etav Upadravkarau Visheshad Agnimarutau /





Atisthaulya Lakshane^[5]

In *Ayurveda*, in *Charaka Samhita*, *Acharya Charaka* has described *Atisthaulya* symptoms in *Ashtoninditiya Adhyay* as follows-

- *Ayusho Rhasa*(shortening of lifespan)
- *Javoparodha*(hampered movements)
- *Kriccha-vyavayata*(paucity of semen and obstruction of genital passage)
- *Daurbalya*(debility)
- *Daugandhya*(foul smell)
- *Swedabadh*(excessive sweating)
- *Kshudhatimatram*(excessive hunger)
- *Pipasatiyoga*(excessive thirst)

Complications of obesity (*Sthaulya*)

Most cases of childhood obesity are merely overweight with rare complications except psychological concern and poor body image. However extreme obesity may be associated with significant morbidity. For example-

1. Behavioral: Social or psychological stress.
2. Skeletal: Genu valgum, slipped femoral epiphysis.
3. Respiratory: Obstructive sleep apnea syndrome.
4. Cardiovascular: Hypertension
5. Metabolic: Hyperlipidemia, diabetes mellitus.
6. Obesity in later life.^[6]

Management of obesity (*Sthaulya*)

- *Guru ch Apatarpanam Cheshtam Sthulanam Karshanam Prati //*

In *Charaka Samhita Sutrasthan*, *Guru Apatarpan Chikitsa* was explained which is useful in treatment of *Sthaulya*. *Guru Apatarpan* helps in treating *Sthaulya* by causing lightness in body organs. *Karshan Chikitsa* also explained in this *Adhyay* which also helps in treating obesity.^[7]

- *Udvartanam Vatharam Kaphamedovilapanam / Sthirikarnam Anganam Tvakprasadkaram Param//*

In *Sushruta Samhita Chikitsasthan*, *Udvartan Chikitsa* was explained which acts as *Vatahar* and *Kapha-medovilapanam* with help of both this characteristics, it helps in treatment of obesity.^[8]

- *Utsadana* which is included in *Dinacharya palan*, also helps in treating obesity because of its *Rukshana* property. *Sthul* patient have to avoid *Diwaswap*, because *Diwaswap* helps in increasing *Kapha*, which helps in *Medodhatu Vruddhi*, which causes obesity.^[5]
- Preventive measure-This disease is considered as gift of modern lifestyle and its breeding ground for so many diseases. *Yoga* poses like *Asanas*, *Pranayama*, meditation and relaxation techniques are helpful for weight loss, lessening of body fat and weight management. Shedding of excess fat and weight and attaining ideal body can be achieved by practicing *Yoga*.
 1. *Sarvangasana*- improves the efficiency of the thyroid gland, which is responsible for correcting body weight.
 2. *Pashchimottanasana*- helps to reduce excess fat in abdominal region.
 3. *Padahastanasana*- improves the metabolic process of the body by acting on thyroid and pituitary gland and thus control it. It also helps in reducing belly fat.
 4. *Bhujangasana*- massages the abdominal organs, increase the flexibility of back and also regulates the thyroid gland. It is good for childhood obesity.
 5. *Dhanurasana*- helps to burn excessive fat in the body.^[9] Life style modifications such as
 - Mild to moderate exercise according to individual capacity.
 - Regular habit of Brisk morning walk for 30 minutes.
 - Avoid sedentary habits.
 - Avoid excessive sleep.
 - Avoid watching TV while having food.
 - Avoid alcohol and smoking.^[10]

Do's and Don'ts-(*Pathya* and *Apathya*) Do's

1. Take low-fat and low-calorie food items.
2. Take more proteins to stay longer without food.
3. Steamed/ boiled and baked vegetables rather than fried.
4. Take frequent small meals to avoid food cravings.
5. Drink skimmed milk instead of whole milk.
6. Take healthy foods such as- oatmeal, walnuts, salads, bitter gourd(Karela), drumstick(Shigru), barley(Yava), wheat, Green gram(Moong dal), honey(Madhu), Indian Gooseberry(Amla), Pomegranate(Anar) and snake gourd etc and skimmed Buttermilk.
7. Include cabbage in daily meal. It will stop the conversion of sugars to fat.
8. Use warm water for drinking.
9. Include lemon in diet and drinks.^[10]

Don't's

1. High carbohydrate vegetable like – potato, rice etc.
2. More sugary or sweet products, more dairy products, fried and oily foods, fast foods, excess salts.
3. Salty foods or excessive salts in meals.^[10]

DISCUSSION

Ayurveda plays major role in obesity, in the way of prevention and treatment also. By adding *Yoga*, in daily routine and by avoiding *Diwaswap* in afternoon after taking meal and many more things explained by various *Acharyas* in *Dinacharya palan*. With allopathic medications, one can expect an initial weight loss. But this medications also has major side effects. Prolong use of this medications can cause high blood pressure problem in future life. It is also important to remember that these medications only work when they are taken. When they are discontinued, weight gain can occur. *Pathya palan* in *Sthaulya* explained in various *Samhitas* plays important role in reducing obesity in childhood and adults also.

CONCLUSION

By balancing between food consumption and calories needed by the body for energy can help in maintaining ideal body weight. The kind and amount of food we are taking affects the ability to maintain ideal weight and lose weight. The goal of obesity treatment in childhood is to reach and stay with a healthy body weight. Increased physical activity with the help of *Yoga* or exercise also is an essential part of obesity treatment. *Dinacharya palan* as a

preventive measure can also help in reducing rate of obesity in childhood.

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