

# PRINCIPLES OF MANAGEMENT OF OBESITY - AN AYURVEDIC PERSPECTIVE - AN ADVANCED EDITION

SRIKANTHBABU PERUGU\*

Ayurveda is a time tested and time trusted system of medicine. Perhaps this is the only Medical Science existed with 8 special branches from its beginning. It also deals about Wellness Preservation and Combating the already known or newly arising Diseases. For example, Covid 19 Pandemic and Mucor mycosis (Black Fungus) etc., Obesity is a condition having a great antiquity. It is the point of interest for many medical practitioners because its complexity in understanding and formulating management techniques. It contributes for more Morbidity and Mortality and is becoming more prevalence in present society and need definite attention and control. We need to pay more equal importance to both extrinsic and intrinsic reasons leading for Obesity. We can see its mentioning in one set of *Asta Nindita Purushas* (8 undispicable persons) as *Ati Sthoulya. Medho Roga* is also used to describe obesity. If we grossly understand the aetio-pathogenesis this is simple like mismatch in consumption and spending of calories, but management is not so. The major problem with this disease is every doctor says to minimize food consumption and try for more activity to match calories then to correct Agni and Metabolism. Most of the patients are not making up mind for this hence frequent changing of doctors and resorting to easy remedies advertised. This is because of nobody can with stand Hunger and we need to educate patient while asking him to reduce food quantities carefully. He may need our support by *Satwavajay Chikitsa*. We can also use *Yuktivyapasray* here. Like suggesting consuming big cuts of fresh vegetables along with food. This helps to quench

hunger and to stay along with the consulting doctor to plan managements completely. As this condition is *Kapaha-medho* dominant, it needs *Rukshana Chikitsas* initially to check one's rejection to exercise. We need to make him awake during nights by a proper support. In 2 weeks of time his mind starts accepting suggestions to go for exercises. Gradually we need to plan his activity too. Under water activities will be more tolerated by these groups as this will make them to feel easy to do excercises as they don't feel more weight (Archimedes principle). *Manasika chikitsa* – we need to judiciously explain Morbidity and mortality involved into this and social issues too to be addressed. this also helps us to hold the patient/person in our clinics and to plan proper managements.

## **Distribution of Fats**

Basing on it appearance and fat distribution its of 2 types

1. Apple shaped
2. Pear shaped

Apple shaped is more often seen in both men and women, and upper body distribution of fat is more, where as in pear shaped lower body distribution of fat is seen.

## **Essentials of Sthoulya / Medho Roga**

- Medho Rog is a bahu dosha Lakshana –
- Santarpanajanya Vyadhi
- Kapha Nanatmaja Vyadhi
- Rasanimittajanya vyadhi

\* Professor and HOD- Kayachikitsa, Dr. B.R.K.R. Government Ayurvedic College, Hyderabad-500038- Telangana  
e-mail: drperugu@gmail.com

- According to Hemachandra it is a state of over nutrition of body and Reduced intellect-

Before proceeding to understand *Vikriti*, we need to know *Prakriti* of this condition. Lets quickly review *Prasasta Purusha Lakhshanas*, classification of *Sthoulya*, exogenous and endogenous factors, modern and Ayurvedic comparison, Samprapti and etiologies of Medoroga visa-a-vis obesity represented in table 1, 2, 3, 4, 5 and 6.

**Table 1. Characteristics of Prasasta Purusha Lakshanas (Ref. Ch. Su. 21)**

| SI | Ayurveda Terminologies              | English Terminologies                  |
|----|-------------------------------------|----------------------------------------|
| 1  | Sama Mamsapramana-                  | Right curves on musculature            |
| 2  | Sama Samhanana- ,                   | Compactness of the body                |
| 3  | Dridendriya-                        | Strong faculties                       |
| 4  | Vyadheenaamna<br>Balenabhibhuyate – | Optimal immunity                       |
| 5  | Kshut Pipasa Atapasaha-             | can tolerate appetite, thirst and heat |
| 6  | Seeta Vyayamasamsaha –              | can tolerate cold and exercise         |
| 7  | Sama Pakta-                         | Proper Agni                            |
| 8  | Sama Jara –                         | Proper Digestion and assimilation      |
| 9  | Sama Mamsachaya                     | smart appearance                       |

**Table 2. Classification of Sthoulya According to Ayurveda**

| SI | Name of Acharya | Types in Details                                                       |
|----|-----------------|------------------------------------------------------------------------|
| 1  | Charaka         | 1. Sthoulya,<br>2. Atisthoulya                                         |
| 2  | Sushruta        | 1. Sthoulya,<br>2. Medhoroga                                           |
| 3  | Vagbhata        | 1. Adhika (BMI >40),<br>2. Madhyama (BMI 30-40),<br>3. Heena (BMI <30) |
| 4  | Sarangdhara     | Medho dosha                                                            |

**Table 3. Exogenous and Endogenous Factors Influencing Medoroga**

| SI | Exogenous Factors | Endogenous Factors |
|----|-------------------|--------------------|
| 1  | Ahara             | Dosha              |
| 2  | Vihara            | Dhathu             |
| 3  | Nidra             | agni               |
| 4  | Vega dharana      | Mala etc           |

**Table 4. Essentials of Modern and Ayurveda Diagnostics**

| SI | Modern Diagnostics                                         | Ayurveda Diagnostics                                                                                                                                |
|----|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | BMI- outlet's index                                        | Chakshuindriya Pareekshya bhavasu, <i>Ref. Su. Su,10/5</i>                                                                                          |
| 2  | Body Weight and height Ratio                               | Trividha- Pratyaksha, Anumana, Aptopadesa                                                                                                           |
| 3  | Skin fold thickness-SFT                                    | Astavidha Pareeksha-Akriti Pareeksha                                                                                                                |
| 4  | Circumference ratio-Waist/ Hip ratio                       | Dasavidha Pareeksha, Pramana Pareeksha (Antropometry), Samhanana Pareeksha (Skin fold thickness). <i>Ref.: Charak-Vimana 8/117, Su, Su 35/12-13</i> |
| 5  | Density -immersion – Plethysmograph                        |                                                                                                                                                     |
| 6  | DXR- dual energy X ray absorpionometry-                    |                                                                                                                                                     |
| 7  | BMD to estimate osteoporosis                               |                                                                                                                                                     |
| 8  | General tests like Thyroid, Renal, LFT, Lipid profile, etc |                                                                                                                                                     |

**Table 5. Samprapti Ghatakas of Meodroga**

| SI | Samprapti Ghatakas  | Sub-components                                                      |
|----|---------------------|---------------------------------------------------------------------|
| 1  | Dosha               | Kapha, Pitta, Vata                                                  |
| 2  | Dushya              | Rasa, Medhas                                                        |
| 3  | Agni                | Jataragni, Dhatwagni                                                |
| 4  | Srotas              | Medhovaha                                                           |
| 5  | Sroto Dusti Prakara | Sanga, Margavarodha ( <i>Ch.Su.21</i> ), Amata- ( <i>Susrutha</i> ) |
| 6  | Adhistana           | Sarvasareera                                                        |
| 7  | Vyaktasthana        | Udara, Stana, Guda, etc                                             |
| 8  | Udbhavasthana       | Amasaya                                                             |
| 9  | RogaMarga           | Abhyantara & Bahya                                                  |

### Types of Adiposity

- 1) Hypertrophic obesity-enlarged adipose cell
- 2) Hyperplastic obesity-increased number of adipose tissues
- 3) Combination of Both. This information is useful for research and opting for a right drug

### Model for more Calorie Expenditure

- 1) Thermic effect of Physical activity- physical activity to be adapted to that effect to spend more calories with proper breathing.

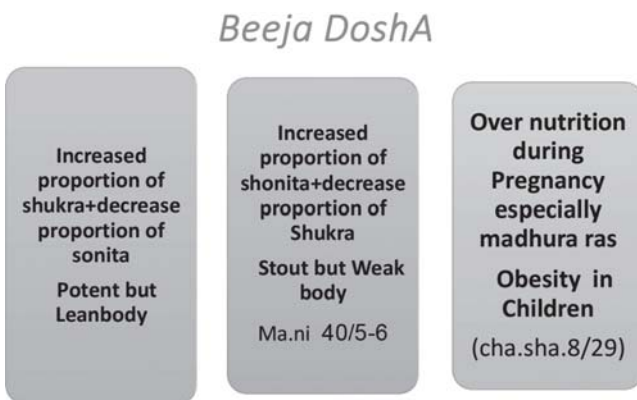
**Table 6. Important Nidana (etiological factors) of Medoroga**

| S1 | Ahara (Diets)                                                                                              | Vihara (Regimen)                                                                                                          | Manasika (Psychological)                           |
|----|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| 1  | Ati Sampurana- Excessive Eating-Cravings                                                                   | Avyayama-not indulging in exercises                                                                                       | Harshananityatwam (Joyful)                         |
| 2  | Santarpana Adhyasana- Over eating                                                                          | Avyavaya (not having sexual life/ family life/pleasure)                                                                   | Achintyam (stress free)                            |
| 3  | Guru, Madhura, Seeta, Snigda, Sleshmala, Mamsa, Payasa vikara sevana,                                      | Divaswapna (sleeping in day time)                                                                                         | Manasonivritti (worry free)                        |
| 4  | Navanna Sevana, Nava Madhya Sevana,                                                                        | Asana sukha (excessive sitting)                                                                                           | Priya darsana (contact with close to heart people) |
| 5  | Sarpi, Ikshu, Gudavikara (high calories)                                                                   | Swapna prasanga (fond of sleep)                                                                                           | Saukhyam (increased comforts )                     |
| 6  | Bhojanaanantara Jala paana- (drinking of water after food consumption)                                     | Gandhamalanu Sevana (fond of fragrances)                                                                                  | ---                                                |
| 7  | Intake of Dadhi (curd)Rasayana and Vajeekarana, Hypervitaminosis and excess use of nutritional supplements | Bhojanaanantara Snanam (bathing after intake of food), Nidra (sleep in excess), Oushadha Sevana (irrational drug therapy) | ---                                                |

- 2) Resting Metabolic Expenditure- we can encourage the person to do small hand and leg movements along with proper breathing techniques.
- 3) Thermic effect of Food- encourage the person to consume warm or hot foods hot water and to avoid cold food items.

**Genetic Relationship of Medoroga**

This is being depicted in figure 1.



**Fig 1.** Genetic relation of Medoroga

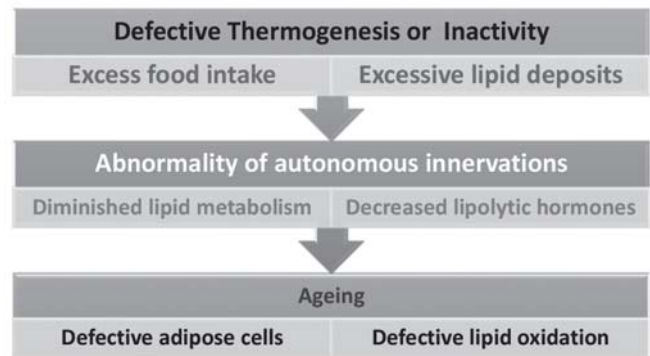
**09 complex Modes of Mechanism of Obesity**

This is being depicted in fig 2.

**Clinical manifestations of Sthoulya/Medoroga (Obesity)**

There are variations of body fat distribution in terms of per cent from one part to other part. Distribution of fats in different area of body are omentum (10%),

**Mechanism -9 modes**



**Fig.2.** 09 Complex Modes of Mechanism of Obesity

subcutaneous fat (50%), peripheral tissues (15%), mesenteric distribution (20%) and intramuscular with connective tissue (5%). Clinical features of Atisthoulya (obesity) according to different classical texts of Ayurveda depends upon the distribution of body fats which are 1. Medho Mamsaativridhi (excessive growth of adipose and muscular tissues), 2. Chala Sphika-udara-sthana (pendular movement of buttock, abdomen and breast), 3. Sarvakriyasu asamarthata (inability in all activities), 4. Srama/Alasya (easy fatigueness), 5. Udara Parswa Vridhi (excess growth of abdomen, sides and flanks) with Alpa Prana (decrease span of life), 6. Kshudra Swasa (decreased lung capacity), 7. Gadgadavani (feeble voice), Gatrasada (bodyache), Soukumarata (flabbiness) and Alpavega (loss of kineticity), 8. Tandra –Nidradhikayata (excessive drowsiness and sleep), 9. Maladhikyata-Seetangi-Swetavabasa-Sweta mutra, netra, varchas (excess stool formation, coldness of body, paleness, pale urine, eye and stool), 10. Ayadhopachaya

(improper body structure), 11. Anutsaha (lack of enthusiasm), 12. Alpa Vyavaya (low libido), 13. Uarda (pruritis), 14. Krathana (snoring), 15. Mukhamadhurya-Mukhasrava- Sleshmodgeeranam (sweetness, watering and frothyneess of mouth), 16. Hridayopalepa-Dhamanipraticchaya (heaviness of pre-cordial region with venous engorgement), 17. Sthaimitya-Guru gatrata (inertia and heaviness of body) and 18. Apakti-Tripti-Balasaka-Kantopalepa-Galaganda (indigestion, easy satiety of food, slurrries throat and goiterous growth).

### ***Sthoulya Upadrava (Complications of Obesity)***

Common complications of obesity are insulin resistance in patients with diabetes mellitus, infertility, low libido, Manasika Vikaras (psychological disorders) leads to more cardiac problems, cholelithiasis and cholecystitis. It also brings in more degenerative disorders like arthritis and dermatological disorders.

### ***Chikitsa Sutra (Ayurvedic Principles of Management)***

- Guru and Atarpana (heavy and non-nourishing) are the key points in management.
- Posology: this is another important aspect for preferring management for obesity. It should always be administered in praghaktakaala (*AH.Su.23/14*).
- Lekhanaoushadhi (scrapping drugs) is also to be administered in early morning (Sarangdhara Samhita Purvakhanda 4/10).
- Steps for management can be like Nidana Parivarjana à Shamana Chikitsa à Samshodhana, instead of Sodhana followed by Shamana.
- Recommending water consumption before food helps in managing Sthoulya.

### ***Some Common Ayurvedic Formulations for the Treatment of Obesity***

1. Navayasa Louha and Navaka Guggulu combination – It contains Trimada (*Plumbago zeylanica*, *Cyperus rotundus* and *Embelia ribes*), Triphala (*Terminalia chebula*, *Terminbalia belerica* and *Phyllanthus emblica*) and Trikatu (*Piper longum*, *Piper nigrum* and *Zingiber officinalis*) along with either Louha or Guggulu. Trimada-helps to control cephalic part of appetite as it contains Musta and Trikatu contributes for abdominal part of digestion and absorption. Triphala evacuate excess bowel

and maintain motility of GIT. Louha helps to correct Raktagni and Guggulu helps in controlling Medhas and both Loha and Guggulu works even as Rasayana.

2. Few logical options - These are few combinations to consider to develop new medicines like Vachaharidhradigana, Varadigaana, Varunadigana, Gomutra, Brihatkravyadi Rasa, etc .,
3. Modified use of Vardhamamna Prayoga – To be used in increasing doses with each tablet on every day upto 10 days. .
4. Chowshastaprahar pippali, Amrita Bhallataki Rasayana, Shilajith etc – to be used in same patten on Vardhamamna Prayoga.
5. Lekhan basti is to be admisitered carefully by adapting good measures to minimize the vataprakopa.
6. Drinking of water can be replaced with madhudaka or suntihimam etc.

### ***Bahih Parimarjana Chikitsa or BPC (External Application of Treatment)***

Considering the distribution of fats (sub cutaneous fats are 50%) BPC plays a vital role in achieving inch loss than kilogram loss. Kola Kulathaadi , TriphalaChunam for Udvarthana are preferred for this purpose as massage. Nisa Useeradi tailam is helpful in dourgandya (feter) because of excessive perspiration. Other benefits of BPC are Twak Prasadakarana, Anga Sthireekarana, Gauravahara, Dourbalyahara, Tandra, Kandu, Mala, Vata hara and Twak Mruduta.

### ***Organ Specific Ayurvedic Treatment of Obesity***

- Ayaskriti / Chandra Prabha Vati for Uro genital System
- Arogya Vardhanai for GIT &Hepato biliary system
- Panchamrita Parpati with Jeeraka for intestinal metabolism
- Brihatkravyadi Rasa for Abdominal / Omental Fat
- Loha, Shilajith, and Abhrakabhasma are useful
- Grahi dravyas like Shunthi, Gaja Pippali are best options for some time.

- Sramsana- Aragwada,
- Anulomana-Hareetaki,
- Rechana-Trivrit,
- Bhedana- Katuki among these four, one is to be preferred basing on various other considerations.
- Yava- Pureesha Janananaam, -Vrikshamla,

- Musta has a synonym like Kodrasta means Pigs like them a lot.
- Asthisrinkhala- *Cissus quadrangularis*
- Lasuna are few more logical options.

In this connection, it is to be mentioned that to adapt Chedana-Pachana-Lekhana-Chikitsa more care is to be observed as it may lead to increased bleeding tendency and alters renal functional threshold. □