**STHOULYA – PRINCIPLES FOR PREVENTION AND MANAGEMENT**

**Dr. Ashwini N., Assistant Professor, Dept., of Roga Nidana Evam Vikruti Vignana,**

**Adichunchangiri Ayurvedic Medical College, Hospital and Research Centre,**

**Nagarur, Bangalore.**

**Contact Number: 7026362663**

**Email Id- nashwini97@gmail.com**

**Introduction:**

A condition where there is Sphik (Buttocks), Sthana (Breast), Udara (Abdomen) Lambana (enlargement or flabbiness) is called as Sthoulya1. Which can be considered in terms of Overweight or Obesity in contemporary medicine. Overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health.  A body mass index (BMI) over 25 is considered overweight, and over 30 is obese 2.  Worldwide, the prevalence rate for being overweight or obese between 1980 and 2013 increased 27.5% for adults and 47.1% for children, for a total of 2.1 billion individuals considered overweight or obese3.

Ayurveda considers Sthoulya to be one among Ashta Maha Gada (8 Diseases which are difficult to cure) and the disease which have 8 complications majorly which can contribute to Disability adjusted life years or death. The same concept is validated by contemporary science where Raised BMI is a major risk factor for non-communicable diseases such as cardiovascular diseases (mainly heart disease and stroke), which were the leading cause of death in 2012; diabetes; musculoskeletal disorders (especially osteoarthritis – a highly disabling degenerative disease of the joints); some cancers (including endometrial, breast, ovarian, prostate, liver, gallbladder, kidney, and colon) 4.

Obesity will affect the quality of life by affecting the self-esteem of a person thus leading to psychological problems and looking at the complications of Obesity it’s the need of hour to treat and prevent Obesity which is emerging out as epidemic in India5 Ayurveda being a life science have main two aims i.e., “Swasthsya Swastha Rakshanam” and “Aturasya Roganut”. Thus the prevention and treatment care of Sthoulya will be discussed in this paper.

**Sthoulya:**

Sthoulya being a major burning issue at present. It is a condition where there is Sphik (Buttocks), Sthana (Breast), Udara (Abdomen) Lambana (enlargement or flabbiness). Few authors have named it as Medo-Dosha as Medas is the prme Dhatu involved.

The cause of Sthoulya mentioned in Ayurveda classics are mentioned in **Table No.01**

**Table 01: Nidanas (Causes) of Sthoulya and their effects on body6.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Category of Cause** | **Cause** | **Effect on body** |
| 1. | Aharatmaka Nidana (Cause related with Diet) | * Ati-Guru Sevana (Heavy food quality and quantity wise),
* Madhura Ati Sevana (Food with more sweet and having more calories),
* Sheetahara Sevana (Food having cold potency)
* Ati-Snigdha (Food with more fat content),
* Shleshma Bahula and Pichhila Aahara (Food articles which increase Kapha such as Curd, Pastries, Cheese..etc),
* Adhyasana (Over eating),
* Anupa Mamsa Sevana (Excess intake of Non-Veg)
 | It causes obstruction in Medovaha Srotas (leading in accumulation of fat) by aggravation of Kapha. |
| 2. | Viharatmaka Nidana (Cause related with Physical Activity) | * Avyavaya (Lack of sexual intercourse),
* Avyayama (Lack of exercise),
* Diwaswapna (Day sleep),
 |
| 3. | Manasa Nidana (Cause related with Psychology) | * Achinta (Abstinence from anxiety)
* Nitya Harsha (Continuous joy)
 |
| 4. | Anya (Others) | Beeja Swabhava (Hereditary) |

**Ashta Doshas of Sthoulya:**

Aayushohrasa (Decreased Life Span), Krichha Vyavaya (Difficult intercourse), Javoparodha (Slow paced movements/ actions), Ayathopachaya (Deposition of fat in abdomen, buttock and breast area), Daurbalya (Decreased strength), Kshudati Matra (Increased appetite) and Pipasatiyoga (Increased thirst) and Kshudra Swasa (Shortness of breath) are considered to be the main 8 Doshas (Symptoms) of Sthoulya7.

**Samprapti (Pathogenesis):**

Indulgence in the above mentioned cause will lead to Kapha Dosha Vriddhi (Increase in Kapha Dosha) which in turn leads to Vriddhi of Medho Dhatu (Increase in fat content of the body), Sanga in Medhovaha Srotas (Obstruction of channels) there by leading Vata Prakopa (Vitiation of Vata Dosha) and thus paving a way to Jataragni Sandookshana (Increased Appetite) which compels the person to excess intake of food thus leading to Fat accumulation 8 this vicious cycle continues until intervened with any sought of life style changes, dietary management or treatment.

**Obesity:**

The fundamental cause of obesity and overweight is an energy imbalance between calories consumed and calories expended. Globally, there has been:

* An increased intake of energy-dense foods that are high in fat and sugars; and
* An increase in physical inactivity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization9.
* Stress, cultural pressure to attain a certain body type and poor self-esteem can worsen the condition.

As per the revised consensus guidelines for India population with BMI <18.5 kg/m2 is categorized as underweight, BMI 18.5-22.9 kg/m2 are said to be normal or lean individuals, BMI 23.0-24.9 kg/m2 as overweight population and BMI ≥25 kg/m2 to be considered as obese10.

**Understanding Kriya Kala in Sthoulya with appropriate treatment:**

Kriya Kala is defined as “Chikitsa Avasara Kala’11 that is there are multiple stages in manifestation of full-fledged disease as such thus if prevention of progression of disease can be stopped at these stages and prevent the further stages of disease manifestation. Understanding of the Kriyakala can be done by tracing back the different stages of Sthoulya as mentioned in the **Table 02**

Table 02: Kriya Kala in Sthoulya and its treatment12

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No** | **Name of the Stage and Explanation** | **Signs and Symptoms Observed** | **Treatment** |
| 1. | Sanchaya Avastha – Here there is quantity increase of Kapha. | Angagourava (Heaviness of the body) and Alasya (Lethargy) | Nidana Parivarjana (avoid the cause such as Sedentary life style, heavy fat meal…etc). |
| 2. | Prakopa Avastha – Here there is further increase in Kapha Dosha both in quality and quantity. | Atinidrata and marked Alasya (Always sleepy and Restless) | Mrudu Shodhana (Mild Purification procedures) or Shamana Aushadis (Oral medicines) can be administered. |
| 3. | Prasara Avastha – Increased Kapha will cause blockage in Medovaha Srotas which causes Vata Prakopa. | Agni Sandookshana (Increased Appetite) | Kaphahara Chikitsa like Udavartana (Powder Massage), Vamana (Mild medicated emesis) and Kapharhara Aushadas like Asava Arishtas can be administered. |
| 4. | Sthana Samshraya- The vitiated Doshas gets lodged in weaker points and produce signs and symptoms. | Guru-Gaatrata (Heaviness of the body) Sweda Abhada (Decreased perspiration), Kshudaati-matra (Increased appetite) and Pipasaatiyog (Increased thirst) |
| 5. | Vyakta Avastha –Full fledge disease can be seen in this stage. | Sphik Sthana Udara Lambana, Ashta Doshas of Sthoulya are seen in this stage  | The above mentioned treatment with the strict follow of diet is to be adopted. |
| 6. | Bheda Avastha – In this stage complications are noted along with manifestation of other diseases | Specific to the complication occurring. | Treat the complications accordingly |

**Prevention:**

When we talk about prevention of any metabolic disease Diet have a major role to play. Ayurveda being the ancient science has emphasised on Pathya-Apathya (Do’s and DON’T’S) in terms of Ahara (Food intake) and Manas (Psychic Behaviour).

In the context of Medo Roga; Ayurveda has explained Purana Shali, Mudga, Kulattha, Uddalaka, Kodrava, Yava, Godhuma, Kshoudra, Shyamaka, Chavya, Chitraka, Jiraka, Trikatu, Hingu, Dadhi Mastu 13,14 Gavedukanna, Kulatha, Chanaka, Masura, Mudga, Laja, Takra, Sura, Chingata, Matsya, Vartaka Phala, Sarshapa Taila, Ela, Patrotta Shaka, Pratapta Jala and Sauvarcha Lavana as Aharaja Pathya 15 .

Purana Vamsa Bija, Shyamaka Dhanya, Nivara Dhanya, Koraduha, Yava, Kulatha, Chanaka, Masura, Mudga, Tuvara, Madhu, Laja, Takra, Katu-Tikta-Kashaya Dravya, Pingala Matsya, Sura, Vartaka, Triphala, Guggulu, Trikatu, Payasa, Shweta Sarshapa Taila, Ela, Yavakshara, Akshataila, Patra Shaka and Ushna Jala are considered as Aharaja Pathya in Medo Roga 16.

Shali-Godhuma, Ksheera, Ikshu Vikruti, Masha, Sauhitya Sneha, Mamsa, Matsya, Madhura Dravyas 17, 18 Aja Dugdha, Kashaya Dravya, Yasti Madhu 19 are considered to be Aharaja Apathya in Medo Roga. Ahara Vargas (Category of Food Stuffs) which can be considered as Pathya based on their Guna Karma in mentioned in Charaka Samhita 20.

Effective combat of stress and anxiety can be done by following proper mental hygiene few tips to control the mind.

* Care Yourself.
* Try to be engaged and focused.
* Ground Yourself (Concentrate on body and Mind).
* Practice Deep Relaxation Techniques/ Breathing Exercise.
* Improve Social Interpersonal Relationship.
* Detox from social media.
* Be positive and Spread Positivity.

**Discussion:**

The above mentioned Shodhana line of treatment will eliminate the morbid Kapha Dosha and Medo Dosha and thereby corrects the metabolic process, whereas the Shamanoushadis i.e., the oral medications will be beneficial in reducing weight by its Kaphahara, Ushna, Teekshna, Sroto Shodhaka properties. Following dietary regimen regularly is utmost important in prevention and maintenance of Sthoulya. Stress, Anxiety and Depression which are precursors of Obesity can be countered by adopting Satvavajaya Chikitsa.

**Tips to follow on daily basis.**

* Watch on what you eat and the way you eat.
* Exercise Regularly.
* Avoid Day Sleep.
* Manage your stress levels.
* Avoid Alcohol.
* Healthy Lifestyle.
* Positive Attitude and determination.

**Keep a regular check on:**

* Energy Levels.
* Weight and BMI.
* Waist – Hip Ratio.
* Lipid Profile.
* Diabetic Profile.

**Conclusion:**

Obesity being one of the major metabolic disorder where the present Life Sedentary life style, intake of fast and junk food, lack of exercise and urbanization are the major cause. Obesity being understood in terms of Sthoulya in Ayurveda can be treated using Panchakarma and other herbal and herbo-mineral preparation but prevention has the prime importance as it is easy to pluck a plant when it is still a sapling, but it is difficult when it becomes a tree. If some attention is paid towards the simplest of clinical symptoms several disease can be handled successfully by doing right Kriya (Chikitsa) at right Kala (timely action). The practical application and analysis of kriyakala helps in prevention of disease at different levels. Sthoulya being a life-style disorder it is important to treat it so that it does not lead to any other secondary disorders. Treatment of Sthoulya is to be planned by evaluating the Bala (Strength of patient and disease) and Kala (Kriya Kala and Season) and planned accordingly.

**References:**

1. Agnivesa, Charaka Samhita, Ayurveda Dipika commentary of Chakrapanidatta, edited by Vaidya Jadavaji Trikamji Acharya, Chaukhambha Prakashan, Varanasi reprint - 2011, Sutra-Sthana, 21 Chapter ,Verse:9, Page No.117.
2. Available from the URL: <https://www.who.int/health-topics/obesity>, 25/07/2023, 15:16.
3. Available from the URL: <https://www.ajmc.com/view/obesity-definition-comorbidities-causes-burden>, 25/07/2023, 15:18.
4. Available from the URL: https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight, 25/07/2023, 15:40.
5. Available from the URL: https://en.wikipedia.org/wiki/Obesity\_in\_India, 25/07/2023, 15:45.
6. Agnivesa, Charaka Samhita, Ayurveda Dipika commentary of Chakrapanidatta, edited by Vaidya Jadavaji Trikamji Acharya, Chaukhambha Prakashan, Varanasi reprint - 2011, Sutra Sthana, 21 Chapter , Verse:16, Page No.119.
7. Agnivesa, Charaka Samhita, Ayurveda Dipika commentary of Chakrapanidatta, edited by Vaidya Jadavaji Trikamji Acharya, Chaukhambha Prakashan, Varanasi reprint - 2011, Sutra Sthana, 21 Chapter, Verse:9, Page No.117.
8. Agnivesa, CharakaSamhita, Ayurveda Dipika commentary of Chakrapanidatta, edited by Vaidya Jadavaji Trikamji Acharya, Chaukhambha Prakashan, Varanasi reprint - 2011, Sutra Sthana, 21 Chapter, Verse:10, Page No.117.
9. Available from the URL: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>, 25/07/2023, 15:50.
10. Available from the URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4080037/>, 25/07/2023, 15:52.
11. Sushrutha, Sushrutha Samhita, Nibandhasangraha commentary of Sri Dalhana Acharya and Nyaya Chandrika Panjika of Sri Gayadasacharya on Nidana Sthana, edited by Vaidya Jadvji Trikamji Acharya & Narayan Ram Acharya ‘ KavyaTirtha’, Chaukhamba Sanskrit Sansthan Varanasi, Reprint-2012, Sutra Sthana, 21 Chapter, Verse: 36, Page No.106.
12. Available from the URL: <http://iamj.in/posts/images/upload/3655_3658.pdf>, 25/07/2023, 15:56
13. Vaidya Sri Lakshmipati Shastry, Yogaratnakara, Chowkhamba Prakashana, Uttarardhagata, Medo Roga Nidana, Verse-45-46, Pg. No. 98-99 (2nd Half).
14. Commentary by Dr. Bulusu Sitara, Bhavaprakasa of Bhavamisra, Chaukambha Orientalia, Varanasi, Reprint Edition: 2017, Volume: 2, Pg. No: 437.
15. Dr. G. Prabhakara Rao, Bhaisajya Ratnavali of Kavirajshri Govind Das Sen, Chaukambha Orientalia, Varanasi, First Edition 2014, Pg. No: 88-97.
16. Prof. K. Rama Chandra Reddy, Vaidya Cintamani, Bhesajottama Grantha, A great treatise of best recipes by Shri Vallabhacharya, Chaukhambha Orientalia, Varanasi, First Edition: 2014, Pg. No: 142.
17. Dr. G. Prabhakara Rao, Bhaisajya Ratnavali of Kavirajshri Govind Das Sen, Chaukambha Orientalia, Varanasi, First Edition 2014, Pg. No: 88-97.
18. Prof. K. Rama Chandra Reddy, Vaidya Cintamani, Bhesajottama Grantha, A great treatise of best recipes by Shri Vallabhacharya, Chaukhambha Orientalia, Varanasi, First Edition: 2014, Pg. No: 143.
19. Prof. K. Rama Chandra Reddy, Vaidya Cintamani, Bhesajottama Grantha, A great treatise of best recipes by Shri Vallabhacharya, Chaukhambha Orientalia, Varanasi, First Edition: 2014, Pg. No: 94
20. Available from the URL: <http://ijapc.com/upload/MNAPC-18-I1-4-P-11-20.pdf>, 25/07/2023, 15:54