

INTERNATIONAL JOURNAL OF AYURVEDA AND PHARMACEUTICAL CHEMISTRY

www.ijapc.com E ISSN - 2350-0204

ODELONE 9 ISSUE 1 IOTH JULY 2018

Greentree Group Publishers

REVIEW ARTICLE

www.ijapc.com e-ISSN 2350-0204

Shadvidhopkram - An Exclusive Treatment Principle of Ayurveda & Its Application in Today's Era

VaishaliKuchewar*

*Dept. of Kayachikitsa,Mahatma Gandhi Ayurved College, Hospital & Research Centre, DMIMS(Deemed to be University), Sawangi, Wardha, MS, India

ABSTRACT

In Ayurveda, Yuktivyapashraya is the fundamental measure to manage any disease. It is the principle by which a physician has to understand the involvement of Dosha, Dhatu, Mala and Strotas to select treatment strategy. Acharya Vagbhat emphasized on the concept of Dvividhopkram i.e. Santarpanupakram & Apatarpanupakram. Shadvidhopkram is described by AcharyaCharak. It includes six upakramas i.e. Langhan (De-nourishing therapy), Bruhan (Nourishing therapy), Snehan (Oleating therapy), Swedan(Sweating therapy), Rukshan (Drying therapy) and Stambhan (Astringent therapy). Objectives of this review are to analyze, explore and correlate the concept of Shadvidhopkramwith the help of conducted researchesand discuss its application in today's era. Metabolic syndrome is a major and intensifying worldwide problem. It can be considered as Santarpanajanyavikar. Canceris a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. As there is excessive growth, it can also be included in Santarpanjanyavikar. These disorders can be tackled by applying Langhan, Rukshan or Swedanupakram. Apatarpanjanyavikar are caused due to Vataprakopak Ahar-Vihar, chronic illness, improper absorption of nutrients. Nutrition deficiency disorders, immunodeficiency and degenerative disorders can be included in Apatarpanjanyavikar. The treatment principle for Apatarpanjanyavikar is Bruhan, Snehan and Stambhan. In this review, multiple treatment modalities are correlated with Shadvidhopkram. From this critical review, it can be concluded that *Shadvidhopkrma* is a comprehensive treatment principle. Every disease can be treated by applying one or combination of two or three of these principles appropriately.

KEYWORDS

Dvividhopkram, Shadvidhopkram, Santarpanjanyavikar, Apatarpanjanyavikar



Received17/05/18 Accepted04/06/18 Published 10/07/18

INTRODUCTION

Daivavyapashraya,

Yuktivyapashraya&Satvavjaya are considered as common treatment principle in Ayurveda. Yuktivyapashraya is the fundamental measure to manage any disease. It is the principle by which a physician has to understand the involvement of Dosha, Dhatu, Mala and Strotas to select treatment strategy.

AcharyaVagbhat emphasized on the concept of *Dvividhopkram* i.e. *Santarpanupakram*&*Apatarpan upakram*¹. He thought that each disease is included in either *Santarpanjanyavyadhi* or *Apatarpanjanyavyadhi*.

Santarpanjanyavyadhi can be treated with Apatarpanupakram& vice-versa.

ShadvidhopkramisdescribedbyAcharyaCharak. It includes six upakramasi.e.Langhan(De-nourishing

therapy),*Bruhan*(Nourishing

therapy), Snehan (Oleating

therapy), Swedan (Sweating

therapy),*Rukshan*(Drying therapy) and *Stambhan*(Astringent therapy)². According to *AcharyaCharak*, any ailment can be treated by using one or combination of it. *Langhan*, *Rukshan* and *Swedan* are included in

Apatarpanupakram&Bruhan,Snehan,

Stambhan are included in SantarpanUpakram.

The objectives of this review are

• To analyze the concept of *Shadvidhopkram*

• To explore and correlate the *Shadvidhopkram* with the help of conducted researches

• To discuss the application of *Shadvidhopkram* in today's era

Basic Pathogenesis, classification of Diseases and application of Shadvidhopkram



Treatment Principle

- Langhan
- Rukshan
- Swedan

Scientific aspect of Shadvidhopkram

Santarpanjanyavikar Metabolic syndrome is a major and intensifying worldwide problem due to urbanization, excess energy intake, increasing obesity, and sedentary life habits. Metabolic syndrome is a result of improper metabolism. In Ayurveda metabolism is considered as the function of Agni. Above said causes of metabolic syndrome primarily vitiate Agni especially producing Ama, Kapha and Meda. Hence metabolic considered syndrome can be as Santarpanajanyavikar.

In autoimmune disorders, the immune system plays a major role to distinguish self from non-self in preserving the integrity of the host³. Interference in immune function can result in overself-antigens, activity to leading to autoimmunity. During the past 20 years, significant increase has been observed in the incidence of autoimmune diseases worldwide. The etiology and pathogenesis of many autoimmune diseases remain unknown⁴. It is undeniable that today's food regimen is very different from what it was even two or three decades ago. It is

- Bruhan
- Snehan
- Stambhan

stated that diet is a potential environmental risk factor for such disorders. The link between gluten ingestion and gluten sensitive enteropathies are already well established and accepted ⁵. According to Ayurveda, *apathyaahar* causes *agnimandya* which leads to formation of *aam. Aam* can be considered as a principal factor for autoimmune diseases.

Cancer is an abnormal cell growth which can be spread to other parts of body⁶. As there is excessive growth, it can also be included in *Santarpanjanyavikar*.

All these disorders can be tackled by applying *Langhan*, *Rukshan* or *Swedan*.

1. Langhan (De-nourishing treatment) -The word 'langhan' is derived from the word 'laghu'. Whichever procedures or medicines that brings the *laghuta*(lightness) in the body is called as Langhana. Whenever there is vitiation of Kaphadosha& blockages of strotas(microchannels), Langhan therapy is indicated. Langhan includes ten types of therapies. Out of these. Vamana of emesis), Virechana (procedure (Procedure of purgation), Niruhabasti decoction enema) and (procedure of

Nasya(Procedure of nasal instillation) are shodhan therapies and the other Pipasa (controlling of thirst),Maruta (exposure to wind),Atapa (exposure to sun),Pachana (administration of digestive medicine),Upavasa (fasting) and Vyayama (physical exercise) are considered as shaman therapies.

Pipasa(Restriction of water intake) is commonly used in *Jalodar*(Ascites).

Atapsevan(Sun exposure) is indicated in *Kushtha*(some dermatological disorders). Today's Phototherapy can be correlated with *Atapsevan*.

Data revealed that sunlight is almost 6.5 times more effective than a phototherapy unit. Thus, sunlight may be considered an alternative phototherapy for the treatment of neonatal jaundice, particularly in areas where conventional phototherapy units are unavailable⁷.

In the study conducted by Atsushi Tanemura et al., Sun illumination along with tacalcitol may be able to induce natural repigmentation in vitiligo vulgaris⁸. Vitamin D deficiency and decreased exposure to solar UVB radiation have been proved to increase the risks of many common cancers, type-1 diabetes, rheumatoid arthritis. multiple and sclerosis⁹.

Pachan and Upavas are commonly used therapies. It is indicated, when vitiated

dosha or aam are circulated all over body (shakhagatadosha), In metabolic and Autoimmune disorders, Pachan drugs like Trikatu, Guduchi, Nagarmotha are very useful.

Recent studies conducted on different forms of fasting, showed beneficial effects on animal and human health¹⁰⁻¹⁵.

They appear to delay the onset of the following diseases: Autoimmune diseases, Atherosclerosis, Cardiomyopathies, Cancer, Diabetes, Renal diseases, Neurodegenerative diseases, and Respiratory diseases^{16, 17}.

Vyayam is specifically indicated in *medoroga* to burn excessive fats of the body. Physical inactivity is a most important risk factor for cardiovascular disease and other chronic diseases like Diabetes mellitus, Cancer specifically colon & breast, Obesity, Hypertension, Osteoarthritis and Depression^{18,19}.

In a large prospective study, each increase of 500 kcal (2100 kJ) in energy expenditure per week was associated with a decreased incidence of type 2 Diabetes of $6\%^{20}$.

Two recent follow-up studies involving cancer patients (breast and colon cancer) revealed that increased self-reported physical activity was associated with a decreased recurrence of cancer and risk of death from cancer^{21, 22}.

Routine physical activity has been shown to reduce triglyceride levels, increase highdensity lipoprotein [HDL] and decreased low-density lipoprotein [LDL], ²³reduce pressure,²⁴reduce blood systemic inflammation²⁵ decrease blood coagulation,²⁶ improve coronary blood flow.²⁷ and enhance endothelial function²⁸.Increased level of C-reactive protein indicates chronic inflammation, is strongly associated with most of the chronic diseases. It can be prevented by exercise. Recent RCTs have shown that exercise training may cause marked reductions in C-reactive protein²⁹.

2. *Rukshan*(drying treatment) – These are the measures which makes Rukshata (dryness), Kharata (roughness) and Vaishadya (clarity, non-sliminess)in body. It dries up the sticky and fatty constituents of the body. It can be done externally as well as internally. Udvartanis the example of bahyarukshan and oral use of dravya having Katu, *tikta*and *kashay*properties isabhyantarrukshan. *Rukshan*therapy can be given inSantarpanjayavikar which are situated marmasthan in like prameha and vatarakta³⁰.

3. *Swedan* (sweating therapy) – It is a process by which perspiration is produced. It is useful to relieve*stambha* (stiffness), *gaurava* (heaviness) and sheeta (coldness).

Swedan can be correlated with thermotherapy of Modern medicine. It is most commonly used for rehabilitation purposes. Thermotherapy decreases joint stiffness and pain, reduces inflammation and increases blood flow. Heat creates higher tissue temperatures producing vasodilation that increases the oxygen supply and nutrients and the removal of metabolic waste. It is advised in myalgia, Fibromyalgia and bursitis³¹. One study showed that heat therapy is effective in treating leishmaniasis³². Recent in vitro studies have revealed the effectiveness of heat treatment on the metabolism of cartilage matrix components such as proteoglycans and collagen^{33, 34}.

Apatarpanjanyavikar- These are caused due to vataprakopakahar-vihar(lack of nutritious food. excessive exercise), chronic illness, improper absorption of nutrients. Nutrition deficiency disorders, immunodeficiency and degenerative disorders can included be in Apatarpanjanyavikar.

The treatment principle forApatarpanjanyavikar is Bruhan, Snehanand Stambhan.

4. **Bruhan** (nourishing treatment) – It refers to the use of medicines or procedures which support the growth of body. It can be used in k*sheen, kshat* and *durbal* patients. *Kharjuradimantha* **in** karshya, Panchatiktaksheerbasti in osteoarthritis, Guduchighrita for rasayan are some examples of Bruhan. Bruhan is treatment to nourish all *dhatu* the appropriately. There is *dhatu* specific like bruhanchikitsa Rasa bruhan. Mamsabruhan, Asthibruhan. It can be with correlated nutrition therapy. Malnutrition is a major contributor to death and disabilities worldwide³⁵. There are some nutrition deficiency diseases like anemia, scurvy, some neurological disorders. Osteoporosis where bruhanchikitsa is essential.

5. Snehan – It is a procedure by which snigdhata(oiliness), mardavata (softness) and kledan (moistness) is achieved. It is divided into shodhan, shaman&bruhanSneha. According to route of administration, it is divided into bahyasneha&abhyantarsneha. Teel taila and Go-ghrita are called as 'shreshthasneha'. It can be medicated with different herbs as per requirement.

Some nutrients are fat-soluble. Body needs fats to absorb and transport vitamins A, D, E, K, as well as carotenoids. Therefore a lack of fats in diet can lead to deficiencies, exposing many health problems. For example, deficiency of Vitamin D causes bone weakness and deformities, while vitamin A deficiency include anaemia, impotence, night blindness, growth retardation and an increased risk of infection.

In some studies, it is found that 'Sesamin' present in sesame oil significantly decreases the wall thickness and area of aorta and superior mesenteric artery³⁶. Sesamin is valuable for prophylactic treatment of cardiac hypertrophy and renal hypertension³⁷.

The important antioxidants sesaminol, sesamolinol. sesamolin and sesamin maintain the fats including Low Density Lipoproteins (LDL) which cause arteriosclerosis³⁸. Vitamin E protects the body from harmful oxidizing compounds. Sesame seed oil contains gamma tocopherols along with sesaminol and sesamin which possesss Vitamin E like activity.

6. *Stambhan*(Astringent therapy) – This therapy prevents loss of bodily substances and fluids. It is specifically indicated in condition like burn, vomiting, Diarrhoea and hyper sweating where excessive body fluid is lost. The drugs having properties of *madhur*, *tikta*, *kashay* and *sheeta* are used as a *stambhan*³⁹. Use of *Kutaj* or *Bilva* in *atisar*(diarrhoea) or use of *Vasa* in *nasagataraktapitta*(epistaxis) are some examples of *Stambhan*.

CONCLUSION

From this critical review, it can be concluded that *Shadvidhopkram* is a comprehensive treatment principle. Every disease can be treated by applying one or combination of two or three of these principles appropriately.

REFERENCES

 Ashtanghriday, sutrasthan, 14/22, Murthy KRS, Choukhambakrishnadas academy, Varanasi,2007, p. 196

2. Charaksamhita, sutrasthan,

22/4,Kushwah HCS.

ChoukhambaOrientalia, Varanasi, 2014, p.320

3. C. Munz, J. D. Lunemann, M. T. Getts et al., Antiviral immune responses: triggers of or triggered by autoimmunity? Nature Reviews Immunology, vol. 9, p. 246–228, 2009.

4. C. Selmi, Q. Lu, and M. C. Humble, Heritability versus the role of environment in autoimmunity, Journal of Autoimmunity, vol. 39, no. 4, p. 249–252, 2012.

5. F. W. Miller, K. M. Pollard, C. G. Parks et al., Criteria for environmentally associated autoimmune disease, Journal of Autoimmunity, vol. 39, no. 4, p. 253–258, 2012.

 Cancer fact sheet N⁰297. World Health Organization. February 2018. Retrieved 21 March 2018.

7. Salih FM. Can sunlight replace phototherapy units in the treatment of neonatal jaundice? An in vitro study. PhotodermolPhotoimmunolPhotomed 200 1 Dec;17(6):272-7. 8. Atsushi Tanemura et al. Therapeutic Comparison between Sun Irradiation vs. Narrowband UVB Phototherapy along with Concomitant Topical Tacalcitol for Vitiligo Vulgaris, Journal of Cosmetics, Dermatological Sciences and Applications, 2012, 2, 88-91

9. Michael F Holick, Sunlight and vitamin D for bone health and prevention of autoimmune diseases, cancers, and cardiovascular disease,*The American Journal of Clinical Nutrition*, Volume 80, Issue 6, 2004, P. 1678S–1688S

10. Spindler SR. Caloric restriction: from soup to nuts. Ageing Res Rev. 2010;9(3):324-53.

11. Ayala V, Naudi A, Sanz A, Caro P, Portero-Otin M, Barja G, et al. Dietary protein restriction decreases oxidative protein damage, peroxidizability index, and mitochondrial complex I content in rat liver. J Gerontol A BiolSci Med Sci. 2007;62(4):352-60.

12. Caro P, Gomez J, Sanchez I, Garcia R, Lopez Torres M, Naudi A, et al. Effect of 40% restriction of dietary amino acids (except methionine) on mitochondrial oxidative stress and biogenesis, AIF and SIRT1 in rat liver. Biogerontology. 2009;10(5):579-92.

13. Fontana L, Villareal DT, Weiss EP, Racette SB, Steger-May K, Klein S, et al. Calorie restriction or exercise: effects on coronary heart disease risk factors. A randomized, controlled trial. Am J PhysiolEndocrinolMetab.

2007;293(1):197-202.

14. Heilbronn LK, Smith SR, Martin CK, Anton SD, Ravussin E. Alternate-day fasting in nonobese subjects: effects on body weight, body composition, and energy metabolism. Am J ClinNutr. 2005;81(1):69-73.

 Zimmerman JA, Malloy V, Krajcik R, Orentreich N. Nutritional control of aging. ExpGerontol. 2003;38(1-2):47-52.

16. Imai S. SIRT1 and caloric restriction:an insight into possible trade-offs betweenrobustnessandfrailty.CurrOpinClinNutrMetabCare.2009;12(4):350-6.

17. Vaquero A, Reinberg D. Calorie restriction and the exercise of chromatin. Genes Dev. 2009;23(16):1849-69.

18. Blair SN, Brodney S. Effects of physical inactivity and obesity on morbidity and mortality: current evidence and research issues. *Med Sci Sports Exerc* 1999;31:S646-62.

19. McAuley E. Physical activity and psychosocial outcomes. In: Bouchard C, Shephard RJ, Stephens T, editors. *Physical activity, fitness and health: the consensus knowledge*. Champaign (IL): Human Kinetics; 1994. p. 551-68. 20. HelmrichSP, Ragland DR, Leung RW, et al. Physical activity and reduced occurrence of non-insulin-dependent diabetes mellitus. *N* Engl J *Med* 1991;325:147-52.

21. Holmes MD, Chen WY, Feskanich D, et al. Physical activity and survival after breast cancer diagnosis. *JAMA* 2005;293:2479-86.

22. Haydon AM, Macinnis R, English D, et al. The effect of physical activity and body size on survival after diagnosis with colorectal cancer. *Gut* 2005;1:62-7.

23. Berg A, Halle M, Franz I, et al. Physical activity and lipoprotein metabolism: epidemiological evidence and clinical trials. *Eur J Med Res* 1997;2:259-64.

24. Blair SN, Goodyear NN, Gibbons LW, et al. Physical fitness and incidence of hypertension in healthy normotensive men and women. *JAMA* 1984;252:487-90.

25. Adamopoulos S, Parissis J, Kroupis C, et al. Physical training reduces peripheral markers of inflammation in patients with chronic heart failure. *Eur Heart J* 2001;22:791-7.

26. Rauramaa R, Salonen JT, Seppanen K, et al. Inhibition of platelet aggregability by moderate-intensity physical exercise: a randomized clinical trial in overweight men. *Circulation* 1986;74:939-44. 27. Hambrecht R, Wolf A, Gielen S, et al. Effect of exercise on coronary endothelial function in patients with coronary artery disease. *N Engl J Med* 2000;342:454-60.

28. Hambrecht R, Gielen S, Linke A, et al. Effects of exercise training on left ventricular function and peripheral resistance in patients with chronic heart failure: a randomized trial. *JAMA* 2000;283:3095-101.

29. Nicklas BJ, You T, Pahor M. Behavioural treatments for chronic systemic inflammation: effects of dietary weight loss and exercise training. *CMAJ* 2005;172(9): 1199-209.

30. Charaksamhita, sutrasthan, 22/29-30,KushwahHCS, ChoukhambaOrientalia,Varanasi, 2014, p.324.

31. Raj, P. Pritvi, Practical Management of Pain. Mosby. 2.000.ISBN 978-0-8151-2569-3.

32. Reithinger, R.; Mohsen, M.; Wahid, M.et al. Efficacy of Thermotherapy to Treat Cutaneous Leishmaniasis Caused by Leishmaniatropica in Kabul, Afghanistan: A Randomized, Controlled Trial. Clinical Infectious Diseases. 40 (8): 1148–1155.

33. Hojo T, Fujioka M, Otsuka G, et al. Effect of heat stimulation on viability and proteoglycan metabolism of cultured chondrocytes: preliminary report. J OrthopSci, 2003, 8: 396–399. 34. RoosEM, Dahlberg L. Positive effects of moderate exercise on glycosaminoglycan content in knee cartilage – A four-month, randomized, controlled trial in patients at risk of osteoarthritis. Arthritis Rheum, 2005, 52: 3507–3514.

35. World Health Organization. (2013). Essential Nutrition Actions: improving maternal, newborn, infant and young child health and nutrition. Washington.

36. Costa FT, Neto SM, Bloch C Jr, Franco OL (2007),Susceptibility of human pathogenic bacteria to antibacterial peptides from sesame kernels.CurrMicrobiol 55: 162-166.

37. Chavali SR, Zhong WW, Forse RA (1998), Dietary alpha-linolenic acid increases TNF-alpha and decreases IL-6,IL-10 in response to LPS: effect of sesamin on the delta-5 desaturation of omega 6 and omega 3 fatty acids in mice. Prostaglandins LeukotEssent Fatty acids 58: 185-191.

38. Chavali SR, Zhong WW, Utsunomiya T, Forse RA (1997).Decreased production of interleukin-1-beta,prostaglandin-E2 and thromboxane-B2 and elevated levels of interleukin-6 and -10 are associated with increased survival during endotoxic shock in mice consuming diets enriched with sesame seed oil supplemented with Quil-A saponin. Int Arch Allergy Immunol 114: 153-160.

39. Charaksamhita, sutrasthan, 22/32-

33,Kushwah HCS.,ChoukhambaOrientalia,

Varanasi, 2014, p.324.