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A REVIEW ARTICLE ON AETIOPATHOLOGICAL STUDY OF KATIGRAHA (LOW BACK ACHE)

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ABSTRACT

Among all age categories, lower back ache is the most prevalent issue in the modern world. It bears similarities to the Ayurvedic condition katigraha. People in the modern world are tired of this situation. It is a condition where pain (Shoola) and stiffness (Stabhdhata) affect the low back (katipradesha). Katigraha is explained by Shodhala in the Kayachikitsa Khanda, Vataroga Adhikara. In this condition either Shuddha (pure) vata or samavata gets lodged at katipradesha or produces symptoms there. According to modern research, lower back pain is a chronic illness marked by an ongoing, pain, dull or severe pain in the lower back. It is a condition that affects a wide range of demographic groups and has numerous potential causes. In our ancient texts katishoola and katistabhdhata have been described in various clinical conditions. This article mainly emphasis on describing the katigraha condition more widely. This will help us to do treatment more efficiently.

KEYWORDS: *Katigraha, Low Back Ache*

INTRODUCTION

Low back pain affects approximately 60 to 85% of adults during some point of their life [1]. As of 2005, lower back pain ranks as the number one cause of disability in individuals under the age of 45[2]. Katigraha is one such condition in which the vitiated vata is localizing in the Kati Pradesha and produces stiffness and pain there. The term Katigraha is made of two words 'kati' and 'graha'. The word 'kati' is derived from the dhatu "kat + in" and it is considered as a 'shariraavayavavishesha', a body part where the dress is tightened[3]. According to Amarakosha Shroniphalaka is called as Kati[4]. Vaidyaka Shabda Sindhu also considers Shroni as Kati[5].According to Monier Williams – Kati is the hollow space above the hip or the loins.[6] The term 'graha' is derived from the dhatus 'Adant-Churam-Atmam-Saka-Set'. The term is explained as 'Graho Grahanam', by Durgadas, which means to collect or catch.[7] "Graha" means holding. It originated from dhatu "Graha Upadane" –one which gives support. Thus "Katigraha" is a condition of the lower back region that is associated with pain and stiff movements.

AIMS AND OBJECTIVES

1. The conceptual study of *Katigraha*.
2. To review its clinical significance.

MATERIAL AND METHOD

This is based on the conceptual study. *Ayurveda Samhitas, modern literature, and available research updates on the Internet and journals were searched, compiled,* and analysed.

LITERATURE REVIEW

Paribhasha

Acharya Shodhala explains the term katigraha as a condition characterised by the vitiated vayu, either shuddha or with ama, taking ashraya in the katipradesha causing ruja and stiffness in the area.

Sharangadhara has explained it as 'katisthambhena vedana vishesha' a condition marked by pain and stiffness in the kati pradesha.

Paryaaya

The paryaayas of kati are Shroni,Kakudbha and Kankali.

Nidana (Etiological Factors) of Katigraha

A low back pain can happen suddenly or gradually over time from repetitive movements. In modern lifestyle due to long sitting hours, unhealthy diet, lack of exercise and stress are the main cause of low back pain.

Risk factors

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- Jobs requiring heavy and repetitive weightlifting
- Use of machine tools.
- Operation of motor vehicles.
- Cigarette smokers and tobacco consumers.
- Anxiety and depression.
- Stressful occupation as in doctors, police, etc.
- Women with greater number of pregnancies.
- Obesity and other cardiovascular risk factors.
- Monotonous work, working overtime, etc.
- Improper postural habits.

In Gadanigraha written by Shodhala we can get a clear reference of Katigraha as a disease along with other vatavyadhis. Therefore, all the etiological factors of Vatavyadhi as well as Vata Prakopa are taken as Nidana of Katigraha and the same is elaborated in the following subtitles.

A) Aaharaja (dietetic factors)
B) Viharaja (behavior factors)
C) Aagantuja (external factors) and
D) Anya Hetuja (miscellaneous factors)

Hetu (Etiological factors) of Vata Prakopa and Vata Vyadhi so also Katigraha

(A)Aaharaja (Dietetic causes)

Dravyatah (Substantial)	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Aadhaki (Cajanus cajan)	-	+	-	-	-
Bisa (Nelumbuo nucifera)	-	+	+	-	-
Chanaka (Cicer arietinum)	-	-	+	-	-
Chirbhata (Cuccumus melo)	-	-	+	-	-
Harenu (Pisum sativum)	-	+	-	-	-
Jaambava (Eugenia jambolena)	-	-	+	-	-
Kalaya (Lathyrus sativus)	-	+	+	-	-
Kalinga (Holarrhena antidysenterica)	-	-	+	-	-
Kariya (Capparis decidua)	-	-	+	-	-
Koradusha (Paspalum scrobiculatum)	-	+	-	-	-
Masoora (Lens culinaris)	-	+	-	-	-
Mudga (Phaseolus mungo)	-	+	-	-	-
Nishpaava (Dolichos lablab)	-	+	-	-	-
Neevara (Hygroryza aristata)	-	+	-	-	-
Shaluka (Nelumbium speciosum)	-	-	+	-	-
Shushkashaaka (Dry vegetable)	+	+	-	-	-
Shyaamaka (Setaria italica)	-	+	-	-	-
Tinduka (Diospyros tomentosa)	-	-	+	-	-
Trunadhaanya (Grassy grain)	-	-	+	-	-
Tumba (Lagenaria valgaris)	-	-	+	-	-
Uddalaka (A variety of Paspalum scrobiculatum)	-	+	-	-	-
Varaka (Carthamus tinctorius)	-	+	-	-	-
Viroodhaka (Germinated Seed)	-	-	+	-	-

II. Gunatah

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Rukshanna (ununctous diet)	+	+	+	+	+
Laghvanna (light diet)	-	+	+	-	+
Gurvanna (heavy diet)	-	-	+	+	-
Sheetaanna (cold diet)	+	-	+	-	-

III. Rasatah

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Kashaayaanna (astringent taste)	+	+	+	+	+
Katvanna (acrid taste)	+	+	+	+	+
Tiktaanna (Bitter taste)	+	+	+	+	+

IV. Maatratah

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Abhojana (fasting)	+	+	-	-	+
Alpaashana (dieting)	+	-	+	+	-
Vishmaashana (Taking unequal food)	-	+	-	-	-

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(B) Vihaaraja (Behaviour)

I. Karmatah:

1. Mithyayogatah

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Ashmabhramana (Whirling stone)	-	-	+	-	-
Ashmachalana (Shaking of stone)	-	-	+	-	-
Ashmavikshepa (Throwing of stone)	-	-	+	-	-
Ashmotkshepa (pulling down stone)	-	-	+	-	-
Balavat vigraha (wrestling with superior healthy one)	-	+	+	-	-
Damyagaja nigraha (subduing untameable elephant) cow and horse	-	-	+	-	-
Divaasvapna (day sleep)	+	+	-	-	-
Dukhaasana (uncomfortable sitting)	+	-	-	-	-
Dukhashayya (uncomfortable sleeping)	+	-	-	-	-
Ghadhotsadana (strong rubbing)	-	-	+	-	-
Kashtabhramana (whirling of wood)	-	-	+	-	-
Kashtachalana (shaking of wood)	-	-	+	-	-
Kashta vikshepa (throwing of wood)	-	-	+	-	-
Kashtotkshepa (pulling down wood)	-	-	+	-	-
Lohabhramana (whirling of metal)	-	-	+	-	-
Lohachalana (Shaking of metal)	-	-	+	-	-
Lohavikshepa (Throwing of metal)	-	-	+	-	-
Lohotkshepa (Pulling down metal)	-	-	+	-	-
Paragatana (Strike with others)	-	-	+	-	-
Shilabhramana (Whirling of rock)	-	-	+	-	-
Shilachalana (Shaking of rock)	-	-	+	-	-
Shilavikshepa (Throwing of rock)	-	-	+	-	-
Shilotkshepa(Pulling down rock)	-	-	+	-	-
Bhaaraharana (Head loading)	-	+	+	-	-
Vegadharana (Voluntary suppression of natural urges)	+	+	+	+	+
Vegodeerana (Forceful drive of natural urges)	-	-	+	+	-
Vishamopachara (Abnormal gestures)	+	-	-	-	-

2. Atiyogatah

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Atigamana (excessive walking)	+	-	+	-	-
Atihaasya (Loud laughing)	-	+	+	+	-
Atijrumbha (Loud yawning)	-	+	+	+	-
Atikharacapakarshana (Violent stretching of the bow)	-	-	+	+	-
Atilanghana (Leaping over ditch)	+	+	+	-	-
Atiplavana (Excessive bounding)	+	+	-	-	-
Atiprabhaashana (Continuous talking)	-	-	+	+	-
Atipradhaavana (Excessive running)	+	+	-	-	-
Atiprajaagarana (Excessive awakening)	+	+	+	+	+
Atiprapatana (Leaping from height)	-	+	-	-	-
Atiprapeedana (Violent pressing blow)	-	+	-	-	-
Atipratarana (Excessive swimming)	-	+	+	-	-
Atiraktamokshana (Excessive Bloodletting)	-	-	-	-	+
Atisrama (over exertion)	-	-	-	-	+
Atisthaana (standing for a long period)	-	+	-	-	-
Ativyaayaama (Violent exercise)	+	+	+	+	+
Ativyavaaya (excessive sexual intercourse)	+	+	+	+	+
Atiadhyayana (excessive study)	-	+	+	-	-
Adyaasana (sitting for a long period)	-	+	-	-	-
Atyuccabhaashana (speaking loudly)	-	-	-	+	-
Gajaaticarya (excessive riding on elephant)	-	-	+	+	-

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Kriyaatiyoga (excessive purification therapy)	-	-	+	+	+
Paadaaticarya (walking long distances)	-	+	-	-	-
Rathaticarya (excessive riding on chariot)	-	+	-	-	-
Turan'gaaticarya (excessive riding on horse)	-	+	-	-	-

I. Manah

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Bhaya (fear)	+	-	+	+	+
Chinta (worry)	+	-	+	-	-
Krodha (Anger)	+	-	-	-	-
Mada (Intoxication)	-	-	-	-	+
Shoka (Grief)	+	-	+	+	+
Utkantha (Anxiety)	-	-	+	-	-

III. Kalatah

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Abhra (cloudy season)	-	+	-	-	-
Aparaahnna (evening)	-	+	+	+	+
Apararatra (the end of the night)	-	-	+	+	-
Greeshma (summer season)	-	-	+	+	-
Pravata (windy day)	-	+	+	-	-
Shishira (winter)	-	-	-	-	+
Sheetakaala (early winter)	-	+	-	-	+
Varsha (rainy season)	-	+	+	-	+

(C) Aagantuja

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Abhighata (trauma)	+	-	-	-	-
Gaja, Ushtra, Ashvasrnghrayanapatamsana (Falling from speedy, running elephant, camel and horse)	+	-	-	-	-

(D) Anya hetu

	Ca[8]	Su[9]	A.S.[10]	A.H.[11]	B.P.[12]
Aama (undigested article)	+	-	-	-	+
Asruk kshaya (loss of blood)	+	+	+	-	-
Dhaatukshaya (loss of body elements)	+	-	-	-	-
Doshakshaya (depletion of dosha)	+	-	-	-	-
Rogaatikarshana (emaciation due to disease)	+	-	-	-	-
Gadakruta mamskshaya (wasting due to disease)	-	-	-	-	+

Lakshana (Symptoms) of Katigraha

The dominant symptoms of Katigraha is Shoola (pain) which may be dull, burning or sharp. Stambha (stiffness) also occurs due to muscle spasm produced by sama and nirama vayu movement in Kati (Lumbar region).

Samprapti of Katigraha

Vata and Kapha are the two main factors involved in the pathogenesis of Katigraha. Here the pain and stiffness are two symptoms present in the disease which can be attributed the Vata and Kapha Dosha.

Samprapti Ghatakas of Katigraham:

Dosha	Vāta	Vyana Apana (Vrudhi)
	Kapha	Sleshaka, avalambaka (Kshaya)
Dushya	Dhaatu	Asthi, Mamsa, Majja
	Upadhaatu	Snayu
Udbhava sthaana	Pakwaashaya	
Vyakta sthaana	Kati	
Sancharasthana	Sharira (Kati & Adhobhago)	
Srotas	Asthivaha, Purishavaha	
Agni	Mandya	
Mārga	Madhyama roga marga	

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It clearly projects Vata Dosha as the primary cause behind the whole pathogenesis involved in Katigraha. Gadanigrahakara explains that the vitiated shudhavayu or samavayu takes its ashraya in the Kati Pradesha causing pain and stiffness[13].

Kati Pradesha is an area where various sandhis, snaayu and peshis unite. These structures help in the stability of the joint. Shleshka Kapha found in joints provides lubrication, and nutrients and keep joints firmly united. Vata Dosha is responsible for producing all types of pain in our body. Acharaya Charak gave the concept of gata vata by which aggravated Vata gets lodged in other structures like dhatu, updhatu, ashraya and avayava. After getting lodged at those parts it impairs the functions of particular structure and produces disease.

According to Acharaya charaka there are two types of samprapti by which Vata can be vitiated dhatukshaya and margavarodh[14], in dhatukshaya and margavarodhjanya Katigraha there will be qualitative change in the joint which gradually leads to disease manifestation.

Dhatukshaya as a reason for katigraha

Continuous ingestions of food materials which are Ruksha (dry), sheeta (cold), laghu (light), in nature, ratrijagarana (waking at night), vegavidharana (holding urges) all such causes lead to dhatu kshaya and Vata prakopa[15] in body. Rukshaguna of vata decreases the snehansh of kapha dhatu which further leads to the Reduction of Kapha in Sandhis makes Sandhi Bandhana Shithilata. Sthanasamshraya of Prakupita Vata takes place in the Khavaigunyayukta Sandhi in Katipradesha. These all lead to stiffness and pain in the katipradesha ultimately resulting in the disease Katigraha.

Margavarodha as a reason for Katigraha

One should take food in proper quantity because it depends on Agnibala. A person should eat food only when the previous meal is digested if one eats during indigestion then eating food mixed with the product of an earlier meal and vitiates all the food. Excessive consumption of Guru, Shita, Vishtambhi, Shushka, Vidahi, Ruksha, Pichhilha Guna Ahara, and a sedentary lifestyle causes the formation of Ama in the body. This leads to Dosha Prakopa, Disturbance in Agni and reduce metabolism of Rasa Dhatu. Both Jatharagni and Dhatwagni are deranged which causes Srotavarodha in the respective Adhishtana. Due to such srotavarodha Vata gets vitiated and produces symptoms like ruk (pain) and stambha (stiffness) in khavaigunyayukta Sandhi i.e. Kati Pradesh.

Prognosis of katigraha

The prognosis (Sadhyata-asadhyata) of a disease depends on many factors such as the Bala of Nidana or Hetu, the strength of Dosha Prakopa, the Sthana of the disease, the severity of signs and symptoms, duration of the disease etc. It also depends upon the age, sex, Rogmarga, Dhatudushti etc. These common rules are applicable in the case of Katigraha. In addition, Katigraha is a Vatavyadhi and the Svabhava or natural trend of Vayu is also an important factor. Acharya Sushruta has explained Vatavyadhi as Mahavyadhi which is cured with difficulty. He also says that if the patient of Vatavyadhi develops complication like Sunam, Suptatvacham, Bhagna, Kampa, Adhamana and pain in internal organs, then he mayn't survive[16].

DISCUSSION

Vata and Kapha are the two major factors involved in the pathogenesis of Katigraha. Here the pain and stiffness at low back are the two symptoms present in this disease. Due to Vata aggravating factors vata gets vitiated and aggravated at its main lodging place i.e. Pakvashaya due to Apana Vaigunya which is created by relative vitiation of Samana and Prana Vayu due to Nidana Sevana. There are two types of dosha vitiation: margavrodhajanya and dhatukshayajanya. This vitiated Vayu spreads to its other lodging places like Kati, Sakthi etc.

There are various Sandhi, Snaayu and Peshi resides in katipradesha. All these structures help to provide stability to the joint. Snayu also considered as ligament helps to bind the joint together to provide desired joint motion and hence prevent excessive and undesired motion in any direction. Alignment of the joint is done by the help of muscles. When vata is imbalanced it causes pathologies of these structures in the Kati Pradesha leading to their hampered functioning. Ruksha and kharaguna of vitiated vata reduces dravansha of Rasa, Rakta. Shleshkakapha presents in sandhi also decreases due to rukshaguna of vata. It leads to loss of Sthiratva and sandhi bandhana in sandhis. This all causes the appearance of vata vitiated symptoms like katishoola. If ama involvement also there it causes stabhdhata at Kati Pradesha. As there are two types of samprapti told by charak samhita for vatavyadhi following Chikitsa may be adopted.

Samprapti	Probable Chikitsa
Dhatukshayajanya	Snehana, swedana, snehbasti, yapanabasti
Margavrodhajanya	Amapachana, rukshan followed by snehana, vaitranbasti

CONCLUSION

Due to the increased prevalence of low backache in the present era, it is very important to have a critical knowledge regarding this topic. Kati shoola and stabhdhata both the symptoms are present in katigraha but they can also be found in other diseases. It is important to understand the details about the disease and treat the patient accordingly.

REFERENCES

1. *Frymoyer JW. Back pain and sciatica. N Engl J Med 1988; 318: 291-300.*
2. *Van Geen JW, Edelaar MJ, Janssen M, van Eijk JT. The long-term effect of multidisciplinary back training: A systematic review. Spine (Phila Pa 1976) 2007; 32: 249-55.*
3. *Raja Radhakantadeva, Shabdakalpadruma 2nd Part; Edited by Shivaradaprasadvasuna and Sriharicharanavasuna; Naga publishers; Delhi; Reprint; 1987. p. 926.*
4. *Amaramishra, Amarakosha with Ramashrami commentary of Bhanuji Dikshitha; Edited by Pandit Haragovinda*

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Shastri; Chaukhambha Sanskrit Sansthana; Varanasi; Reprint; 2006. p. 294.

5. *Vaidyaka Shabdasindhu compiled by Kaviraja Umeshchandra Gupta; Revised and enlarged second edition by Kaviraj Nagendranath Sena, Chaukhambha Orientalia, Print; 1999. p. 1077.*
6. *Monier Williams: Sanskrit English Dictionary, Motilal Banarasidas Publishers Pvt ltd, Delhi; p. 243.*
7. *Raja Radhakantadeva, Shabdakalpadruma 2nd Part; Edited by Shivaradaprasadvasuna and Sriharicharanavasuna; Naga publishers; Delhi; Reprint; 1987. p. 348-349.*
8. *Charakasamhita of Agnivesa elaborated by charaka and drdhabala with the ayurveda dipika commentary by chakrapanidatta, edited by vaidya jadavaji trikamji acharya, chaukhamba surbharati prakashan, Varanasi,edition 2008, chikitsasthana chapter 28 vatavyadhichikitsa,shloka 15-18 p.n.617.*
9. *Susruta Samhita of suhruta with the nibandhasangraha commentary of sri dalhanacharya edited by vaidya jadavji trikamji acharya,chaukhambha orientalia Varanasi, eight edition 2005, Nidanaasthana chapter 1 vatavyadhinidana shloka 21 p.n. 261.*
10. *Astangasamgraha of vraddha vagbhata with the sasilekha Sanskrit commentary by indu, edited by Dr. Shivprasad Sharma, chowkhambha Sanskrit series office Varanasi,third edition 2012, sutrasthana chapter 19 doshadivijnyaniya shloka 5 p.n. 149.*
11. *Ashtang hradaya of Vagbhata with the commentaries, sarvangasundara of Arunadatta and Ayurvedarasayana of hemadri, edited by pt. Hari sadasiva sastri paradakara, chaukhambha Sanskrit sansthan varanasiReprint 2011, nidanasthana chapter 1 sarvaroganidana shloka 14,15 p.n.444*
12. *Bhavaprakasa of sri bhavamisra edited by bhisagratna pandit sri brahma sankara misra part II,chaukhambha Sanskrit sansthana Varanasi, ninth edition 2005, madhyamakhanda chapter 24 vatavyadhiadhikara, shloka 1,2 p.n. 227*
13. *Tripathi I. editor Sodhal. Gadanigrah. Vol. 2. First edition Varanasi Chaukhamba Sanskrit Sansthan, Vatavyadi; 2011. p. 488.*
14. *Agnivesha, Charaka Samhita, Vidyotini. Shastri K, editors. Sutra sthana. Varanasi: Chaukhamba Sanskrit Sansthan; 1998. p. 693.*
15. *Vagbhata, Astanga Sangraha, Sasilekha Sanskrit commentary. S. Sharma, editors. Nidana Sthana Varanasi: Chaukhamba Sanskrit Sansthan; 2008. p. 413.*
16. *Sushruta, Sushruta Samhita, Vatavyadhiadyaya, Varanasi: Chaukhamba Sanskrit Nidana Sthana. Ayurvedatatvasandipika Hindi Commentary by Kaviraj Dr. Ambikadutt Shastri. Sutra Sthana; 2000. p. 94.*