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REVIEWS

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UNDERSTANDING OF AJAGALLIKA IN TERMS OF CONTEMPORARY SCIENCE

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Abstract:

This article explores Ajagallika, a condition classified as Kshudra roga in Ayurvedic literature, with a focus on its similarities to Molluscum contagiosum in contemporary science. Ajagallika manifests primarily in children and is characterized by painless, raised lesions resembling green and black gram in shape, attributed to Kapha-Vata doshas. The literary review employed sources from classical Ayurvedic texts and modern dermatological resources to analyze the pathology, etiology, and treatment options for both conditions. Observations indicated that while Ajagallika lesions are benign and self-limiting, they are analogous to the viral skin infection of Molluscum contagiosum, which presents as umbilicated bumps and can affect individuals with compromised immunity. The discussion emphasizes the shared traits of these conditions, particularly their clinical manifestations and the nature of contagion. The findings conclude that although Ajagallika is a less severe illness, its features align closely with those of Molluscum contagiosum, underlining the importance of understanding traditional diseases through modern scientific lenses.

Key words: Ajagallika, Aupasargika roga, Kshudra roga, Molluscum contagiosum.

INTRODUCTION:

In Ayurvedic classics, certain illnesses with minimal symptoms that appear as dermatological manifestations are described. More significantly, unlike other serious conditions, these syndromes are not thoroughly described. Either these ailments are of less significant or less severe to the body. This set of diseases is known as Kshudra rogas (set of minor diseases) in Ayurveda that include numerous skin

conditions that impair a person's outward appearance. These diseases have lesser degree of etiological factors, lower magnitude of features and in majority of the conditions these symptoms are confined to the local area of the skin. Many of such conditions do not require any medical treatments; some are self-limiting and if at all treatment is found necessary then mostly have short term treatment. One such condition, which has less magnitude of the symptomatology and lesser degree of intensity, is Ajagallika which are predominantly common in children age group. This article highlights its symptomatology along with its understanding in parlance with the allied science. Here in this article, most of the equivalent terms for Sanskrit terms are taken from AYUSH NAMASTE portal and some are taken from the standard Sanskrit English Dictionary from Sir Monier Monier Williams.

AIM:

To understand the disease Ajagallika in terms of contemporary science.

METHODS:

This work is a literary review study. Materials related to this topic have been collected from different classical literatures of Ayurveda, modern textbooks, indexed journals, authentic websites etc.

RESULTS:

The disease can be studied in two headings namely Ajagallika and Molluscum contagiosum.

A. AJAGALLIKA:

When we scrutinize the classical literatures of Ayurveda we get the description of the disease Ajagallika in Sushruta Samhita[1], Ashtanga Hridaya[2], Ashtanga Sangraha[3], Madhava Nidana[4] and Bhaishajya Ratnavali[5]. In all the references we get similar explanations regarding the cardinal features of Ajagallika. We do not get any such description in the text Charaka Samhita. It is considered to be a disease manifesting in Shweta layer of Twacha (3rd layer of the skin) as per Sushruta[6]. The general features of this condition are as follows:

- **DOSHAS INVOLVED:** Kapha–vata
- **PATHOGENESIS:** Due to the exposure to the etiological factors both the Kapha and Vata doshas get aggravated at the same time. This aggravated Vata dosha interacts with Kapha dosha directing it into the skin and muscles, where it becomes trapped thereby leading to the skin lesions that resemble the shape and size of green gram or black gram characterized by an oily, painless, nodular appearance.
- **CLINICAL FEATURES:** It is a cutaneous manifestation characterized by Snigdha (unctuous eruption), Savarna (having colour same as that of surrounding skin), Grathita (hard eruptions), Neeruja (painless), Mudgasannibha (nodule of the size of greengram)[7]. According to **Bhoja**, these are the elevated skin lesions of Mudga (green gram) and Masha (black gram) shape, homogeneous in colour occurring in between the skin and muscle tissues and caused due to Kapha Vata doshas[8].
- **SUSCEPTIBLE PERSONS:** Generally, it afflicts the children as their body is incompetent to fight

against the diseases. Even it may be seen in adults also[9] particularly those who are immunosuppressed.

- **TYPES:** Based on the manifestation in different age groups it can be divided into two types as that manifesting in children and that manifesting in adults. Based on the treatment aspect it is again divided into Apakva (Non-suppurated) stage and Pakva (Suppurated) stage.

Thus, it can be concluded that in Ajagallika lesion may appear in two forms like a green gram or black gram and the lesions are limited to the skin and muscles without encroaching into the deeper tissues.

TREATMENT:

- Apakva avastha[10] (Non suppurated stage) – Raktamokshana with Jalauka (bloodletting using leech) in Apakva Ajagallika followed by the application of paste of Shukti (pearl oyster), Saurashtra (potash alum) and Yavakshara (barley alkali). Application of paste prepared out of Shyama trivrut (Operculina turpethum), Langali (Gloriosa superba) and Patha churna (Cissampelos pareira) over the lesions can also be done. If the lesions are hard, preparations of alkali (Pratisaraniya kshara)[11] shall be applied or poured on them and break them open.
- Pakva avastha[12] (Suppurated stage) – the treatment should be followed as similar to the treatment of Vrana (wound / ulcer / sore) like Shodhana (wound care technique by cleansing), Ropana (wound healing) etc.
- The lesions of Ajagallika mature swiftly, break open, and cure simply by being pricked by the new, sharp thorns of the Kantakari (Solanum xanthocarpum) plant[13].
- Application of Vrushamooladi lepa[14], i.e., paste of Vrushamoola (Adhatoda vasica) and Vishala (Citrullus colocynthis).

B. MOLLUSCUM CONTAGIOSUM

Molluscum contagiosum is a self-limiting (Meza-Romero et al., 2019), fairly common skin infection caused by a virus named as M.contagiosum, a type of poxvirus[15]. It causes round, firm, painless bumps ranging in size from a pinhead to a pencil eraser. If the bumps are scratched or injured, the infection can spread to nearby skin. It also spreads through person-to-person contact and contact with infected objects. Though it is most common in children, it can also affect adults particularly in those with weakened immune systems. Adults with a healthy immune system can develop molluscum contagiosum from sexual activity with an infected partner. Large lesions on the face may indicate immunosuppression.

SYMPTOMS[16]:

This condition presents with following signs and symptoms:

- Skin lesions or small bumps having features like raised, round, shiny, smooth, skin coloured or pink or white coloured bumps or ‘umbilicated lesions’ (Bumps with a small dent or dot at the top near the center)

- Small bumps generally measuring less than ¼ inch (smaller than 6 millimetres) in diameter.
- Itchy, pink bumps
- Bumps can occur anywhere in the body, but predominant areas affected are face, trunk, arms or legs in children and in adults if the infection is sexually transmitted then bumps may appear on genitals, lower abdomen or inner thighs
- As it is self-limiting condition, if left untreated, the bumps usually disappear in 6 months to 2 years.

STAGES OF MOLLUSCUM CONTAGIOSUM[16]:

The tiny elevations on the skin generally emerge 2 to 8 weeks after becoming infected with the virus. Typically, each bump endures for several weeks or months, develops a crust and eventually disappears. However, new ones tend to appear as the old ones fade, so that the virus continues to spread to other areas of skin. Therefore, crops of mollusca may appear to come and go for several months.

COMPLICATIONS[17]:

The bumps and the skin around them may become inflamed. This is thought to be an immune system response to the infection. If scratched, these bumps can become infected and heal with scarring leading to disseminated secondary eczema or sometimes impetigo. If sores appear on the eyelids, pink eye (conjunctivitis) can develop. More likely the infection spreads to other parts of the body while scratching or rubbing the bumps causing spreading of the virus to nearby skin leading to widespread molluscum contagiosum infection.

TRANSMISSION:

Transmission appears to occur more frequently in moist environments. There are several methods through which M.contagiosum is transmitted between individuals.

- Skin contact with an infected person: Children may spread the virus during regular playtime with peers. In contrast, teenagers and adults are more prone to transmission through sexual interactions.
- Touching surfaces that have been in contact with someone infected with M.contagiosum, such as contaminated towels, clothing, toys, or other personal items
- Sharing sports equipment that had contact with a person who has M.contagiosum like sharing helmets, gloves, wrestling mats and so on.
- Internal transmission – the infected person can disseminate the infection throughout his body. He can transfer the virus from one part of the body to another part by touching, scratching, shaving the bump and touching another part of the body etc.

RISK FACTORS:

The following are factors or occurrences that heighten the risk of contracting the infection. These can be categorized as biological, behavioral, environmental, or genetic.

- Children aged 1 to 10 years – this group is the most frequently affected
- Individuals residing in tropical regions or areas that are warm and humid

- Immunocompromised individuals or weakened immune system – certain conditions and treatments, such as HIV, leukemia, or cancer therapies, can impair immune function.
- Individuals suffering from atopic dermatitis, which leads to scaly, itchy rashes that provide an entry point for the virus responsible for molluscum.
- Persons engaged in contact sports where skin-to-skin interaction is prevalent or where sharing the equipment is also common

PREVENTION:

Following are the measures to be practised for preventing the further manifestation and spread of the condition.

- One has to engage in thorough hand washing using warm water and soap
- Refrain from sharing personal belongings
- Steer clear of touching or picking at the areas of skin where the bumps are present
- Ensure the bumps are kept clean and covered to prevent touching by himself or others, thus avoiding the spread of the virus
- Avoid shaving or employing electrolysis in areas where the bumps are found
- Refrain from sexual activity if the bumps are located in the genital region

MANAGEMENT:

- Topical therapy creams containing iodine, salicylic acid, tretinoin, cantharidin, imiquimod
- Laser therapy to destroy each bump
- Curettage – each bump is pierced and scraped it off the skin with a small tool
- Cryotherapy – freeze each bump with liquid nitrogen

DISCUSSION:

As Ajagallika is a Kshudra roga (set of minor diseases) we may not get much descriptions about it in our classical literatures of Ayurveda. The disease Molluscum contagiosum is a benign tumour of mucocutaneous sites. Incubation period can vary from two weeks to six months.

NIDANA (ETIOLOGICAL OR RISK FACTORS):

We get the description as Vata and Kapha vardhaka nidanas are essential for the manifestation of the disease Ajagallika. As it is more often in children, by virtue children are having Kapha dosha predominance. Various activities like playtime with peers and friends can be interpreted as aggravation of vata dosha. People who live in tropical regions or warm or humid areas also suggestive of more Vata and Kapha doshas. This condition is more common in children due to the less immunity to fight against various disease conditions[18] which also matches with the description of allied science wherein it is said that the immune weakened persons are more susceptible for this condition.

The concept of Aupasargika rogas[19] (infectious diseases) is well explained in Ayurveda and Kushtha roga (diseases related to the skin) is one

among such conditions. Though this contagious aspect of spreading is not mentioned directly in the context of Ajagallika disease, Apakva (non-suppurated) stage of it may have the contagious nature. The mode of transmission of the vector of M.contagiosum is almost similar to the descriptions of Aupasargika rogas (infectious diseases[20]). Prasanga (intercourse with), Gatra samsparsha (person-to-person contact), Nihshwasa (as droplet infection), sharing the objects like Sahabhojana (eating together[21]) and Saha shayyasana (sharing a couch or a seat[22]) are the prime sources or reasons for occurrence of any Aupasargika rogas (infectious diseases)[20] and all these factors are equally responsible for the occurrence of M.contagiosum condition also. Since the lesions are too contagious the lesions have to be removed before they disappear on their own.

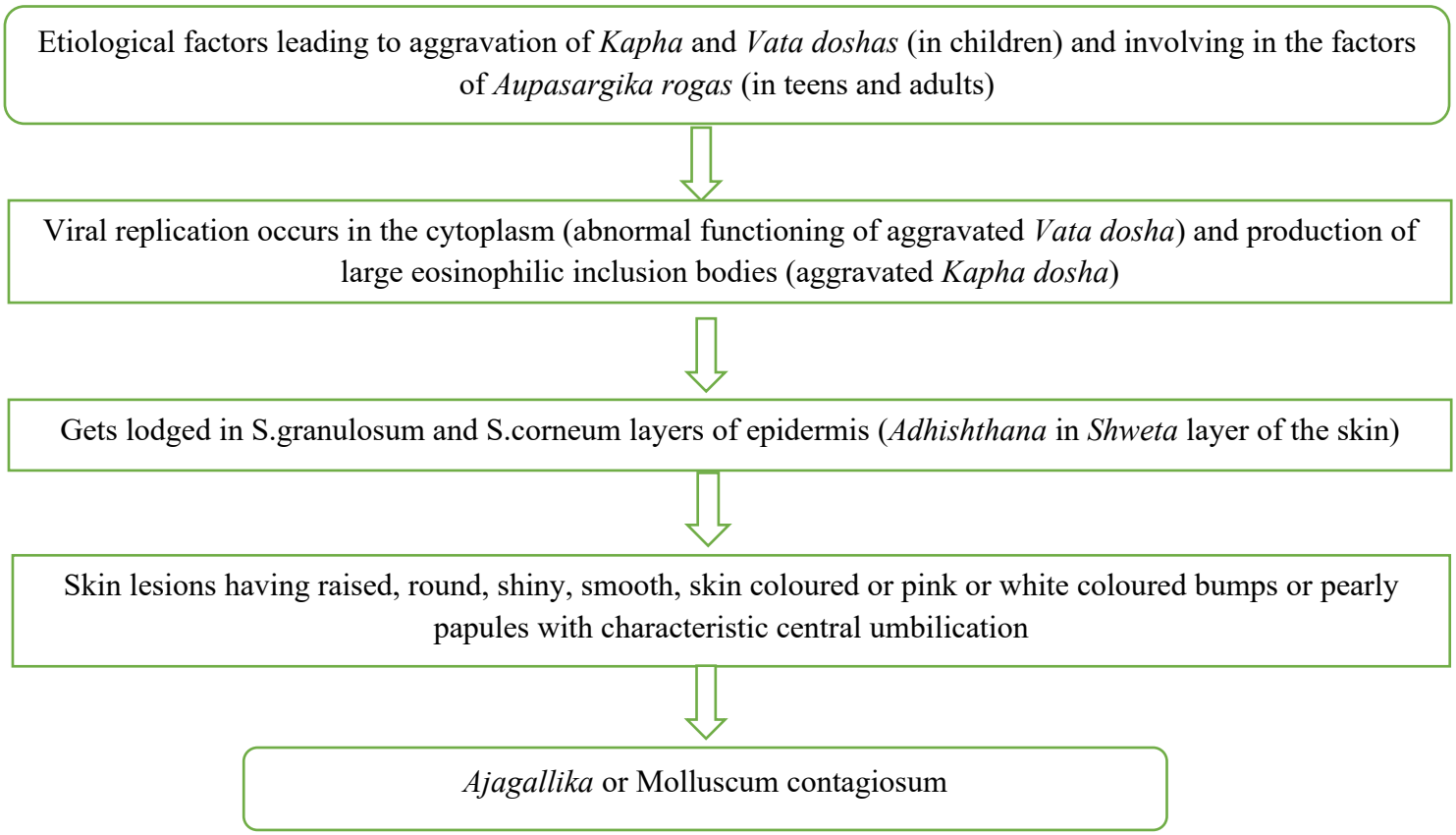
SAMPRAPTI AND LAKSHANA (PATHOGENESIS AND SYMPTOMS):

Epidermal keratinocytes are the target cells. Viral replication occurs in the cytoplasm of the affected cells and produce large eosinophilic inclusion bodies called molluscum bodies or Henderson-Paterson bodies. Inclusion bodies are more evident in stratum granulosum and stratum corneum of the epidermis[23]. This can be understood as the Shweta layer of the skin which is said to be the Adhishthana (site of manifestation of the lesion) for the disease Ajagallika. This viral replication leading to hyperplasia can be understood as abnormal functioning of aggravated Vata dosha and production of eosinophilic inclusion bodies can be understood as abnormal aggravated Kapha dosha producing different symptomatology like itching, lesions having raised, round, shiny, smooth, skin coloured or pink or white coloured bumps which are painless. This also mimics with the description of the features of Ajagallika having the predominance of Kapha Vata dosha. The shape and size of the lesion resembling that of Mudga (green gram) or Masha (black gram) with the slit like appearance in the centre that are painless shall be correlated to the pearly papules of molluscum contagiosum with characteristic central umbilication.

CHIKITSA (TREATMENT):

Many a times treatment is not essential for this condition as it is a self-limiting condition. This also indicates less severity of the condition and is again pointing towards the nature of Kshudra roga (set of minor diseases). Different treatment modalities like Vrana shodhana (wound cleansing therapy) along with external application of herbomineral preparations and internal medications that enhance the immune system along with anti-allergic like Haridra (Curcuma longa), Guduchi (Tinospora cordifolia) etc. have proven better outcome because Ayurvedic management focuses on holistic approach and doshic balance, while modern medicine targets the viral cause and symptomatic relief.

All the pathophysiology can be depicted in the form of a flowchart.



SL.NO. 1: FLOWCHART SHOWING THE PATHOGENESIS OF *AJAGALLIKA* / M. CONTAGIOSUM

CONCLUSION:

Ajagallika is one of the diseases mentioned under the context of minor diseases which are popularly known as *Kshudra rogas* (set of minor diseases). Based on its features and nature of the illness it can be compared with Molluscum contagiosum. It is, sometimes called water warts, a self-limited infectious dermatosis, frequent in paediatric population, sexually active adults, immunocompromised individuals. This can be manifested in the form of *Apakva* (non-suppurated stage) or *Pakva* (suppurated stage). *Apakva* (non-suppurated) stage in adults can be considered as the contagious nature and should be managed with precautions, whereas *Pakva* (suppurated) stage is to be treated similar to the treatment of *Vrana* (wound / ulcer / sore). While *Ajagallika* has lesser diagnostic criteria and broader treatment approaches based on ancient principles, Molluscum contagiosum is a well-defined viral condition with a clear pathogenesis. As a final point, the study sheds light on the similarities between *Ajagallika* and Molluscum contagiosum, highlighting their shared clinical manifestations and contagion nature with different treatment approaches.

CONFLICTS OF INTEREST: Nil

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REFERENCES:

1. Sushruta, *Sushruta Samhita* with *Nibandha Sangraha* Sanskrit Commentary of Dalhana; *Nidanasthana* 13/4; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 318
2. Vagbhata, *Ashtanga Hridaya* with *Sarvanga Sundari* Sanskrit commentary of Arunadatta and *Ayurveda Rasayana* Sanskrit commentary of Hemadri; *Uttarasthana* 31/1; In: Pt. Bhishagacharya Harishastri Paratkar Vaidya, editor; reprint edition; Rashtriya Sanskrit Sansthan, New Delhi; 2002; p 887
3. Vriddha Vagbhata, *Ashtanga Sangraha* with *Shashilekha* Sanskrit commentary of Indu; *Uttarasthana* 36/2; In: Shivaprasad Sharma, editor; 1st edition; Chaukhambha Krishnadas Academy, Varanasi; 2006; p 813
4. Madhavakara, *Madhava Nidana* with *Madhukosha* Sanskrit commentary of Vijayarakshita and Shreekanthadatta, *Uttarardha* 55/2; In: Brahmananda Tripathi, editor; Reprint edition; Chaukhambha Surabharti Prakashan, Varanasi; 2000
5. Anonymous; *Bhaishajya Ratnavali* 60/2; In: Rajeshwaradattashastri Ayurvedashastracharya, editor; 15th edition; Chaukhambha Sanskrit Sansthan, Varanasi; 2002; p 813
6. Sushruta, *Sushruta Samhita* with *Nibandha Sangraha* Sanskrit Commentary of Dalhana; *Sharirasthana* 4/4; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 355
7. Sushruta, *Sushruta Samhita* with *Nibandha Sangraha* Sanskrit Commentary of Dalhana; *Nidanasthana* 13/4; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 318
8. Gayadasa; *Nyaya Chandrika* commentary on *Sushruta Samhita Nidanasthana* 13/4; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 318
9. Dalhana; *Nibandha Sangraha* commentary on *Sushruta Samhita Nidanasthana* 13/4; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 318
10. Sushruta, *Sushruta Samhita* with *Nibandha Sangraha* Sanskrit Commentary of Dalhana; *Chikitsasthana* 20/3-4; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 478
11. Dr. Jambavathi S, Dr. Shailaja S. V.; *Ajagallika* treated with *Pratisaraneeya Kshara Karma* - A Case Report: J Ayurveda Integr Med Sci; 2019; 6 : 266-272
12. Sushruta, *Sushruta Samhita* with *Nibandha Sangraha* Sanskrit Commentary of Dalhana; *Chikitsasthana* 20/4; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 478

13. Anonymous; *Bhaishajya Ratnavali* 60/2; In: Rajeshwaradattashastri Ayurvedashastracharya, editor; 15th edition; Chaukhambha Sanskrit Sansthan, Varanasi; 2002; p 813
14. Raghuram Y.S. and Manasa; "*Ajagallika* meaning, symptoms, treatment"; https://www.easyayurveda.com/2022/05/17/ajagallika/ (as cited on 30.12.2024)
15. Meza-Romero et al.; "Molluscum contagiosum: an update and review of new perspectives in etiology, diagnosis and treatment"; Dove Press Journal of Clinical, Cosmetic and Investigational Dermatology; 2019; 12; 373-381 (PubMed Central)
16. "Molluscum contagiosum" by Dr. Doug McKechnie; http://patient.info/childrens-health/viral-skin-infections-leaflet/molluscum-contagiosum (as cited on 20.01.2025)
17. "Molluscum contagiosum" https://www.mayoclinic.org/diseases-conditions/molluscum-contagiosum/symptoms-causes/syc-20375226 (as cited on 28.12.2024)
18. Gayadasa; *Nyaya Chandrika* commentary on *Sushruta Samhita Nidanasthana* 13/4; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 318
19. Sushruta, *Sushruta Samhita* with *Nibandha Sangraha* Sanskrit Commentary of Dalhana; *Nidanasthana* 5/33-34; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 289
20. Williams Monier Monier; A Sanskrit English Dictionary; Searchable digital facsimile edition; The Bhakti Vedanta Book Trust International; 2002; p 239
21. Williams Monier Monier; A Sanskrit English Dictionary; Searchable digital facsimile edition; The Bhakti Vedanta Book Trust International; 2002; p 1194
22. Williams Monier Monier; A Sanskrit English Dictionary; Searchable digital facsimile edition; The Bhakti Vedanta Book Trust International; 2002; p 1056
23. Rao Shridhar P.N.; Molluscum contagiosum; Microbiology notes; https://www.microrao.com/micronotes/molluscum_contagiosum.htm (as cited on 30.12.2024)
24. Sushruta, *Sushruta Samhita* with *Nibandha Sangraha* Sanskrit Commentary of Dalhana; *Nidanasthana* 5/33-34; In: Vd. Jadavji Trikamji Acharya and Narayan Ram Acharya, editor; 8th edition; Chaukhambha Orientalia, Varanasi; 2005; p 289