Crossref 0a

## An Ayurvedic overview of Ekbom Syndrome with special reference to Atatvabhinivesa

## Pallavi G Poojary<sup>1</sup>, Deeksha D Shetty<sup>2</sup>

<sup>1</sup>Department of Roganidana Vikruti Vigyana, KLE Shri BMK Ayurveda Mahavidyalaya, Belagavi, Karnataka, India <sup>2</sup>Department of Roganidana Vikruti Vigyana, Hillside Ayurvedic Medical College and Hospital, Bangalore, Karnataka, India

## Corresponding Author:-Pallavi G Poojary

Email ID: poojary.pallavi@gmail.com

Submission: 14.01.2025 Acceptance: 21.01.2025 Publication: 28.02.2025

https://www.doi.org/10.63778/PDEASIJRAAS-ARJCPL/2025\_22812

## Abstract:

Ayurveda is the science that addresses the physical and mental well-being of individuals. In addition to treating physical ailments, Ayurveda also offers thorough information on mental and social well-being. Three components are essentially in charge of the genesis of all illnesses, they include *Prajnaparadha* (intellectual blasphemy), *Asatmaindriyartha Samyoga* (overuse, underuse, or inappropriate use of sense faculties), and *Parinama* (time). Currently, rising stress levels lead to a significant increase in *Mano vikara*, or mental illness. Ekbom syndrome also known as Delusional Parasitosis, is a rare somatic type of Delusional disorder. It is a condition where the person is in a fixed false belief that they are infested by parasites, worms, fungi, or other living organisms. Individuals with Ekbom syndrome resist mental health care, believing their conditions stem from a parasitic infestation. This delusional misperception closely aligns with the Ayurvedic concept of *Atatvabhinivesa*. It describes a state in which an individual perceives falsehood as absolute truth, rendering them incapable of recognizing reality. This condition leads to profound impairment of intellectual faculties, resulting in loss of insight into both the disease and oneself. This article aims to explore the rare disease of Ekbom syndrome through the lens of *Atatvabhinivesa* offering an Ayurvedic perspective on its *Trividha Bodhya Sangraha*.

Keywords: Atatvabhinivesa, Trividha Bodhya Sangraha, Ekbom Syndrome, Delusional Parasitosis.

### **Introduction:**

Health is always given the highest priority in all fields of life. All aspects of human existence depend on this fundamental principle, which holds true for both mental and physical health.

Delusional disorders encompass a group of psychiatric conditions primarily characterized by persistent, non-bizarre delusions. Individuals affected by this disorder firmly believe in their delusions and do not perceive themselves as mentally ill. As a result, they are reluctant for psychiatric evaluation and actively oppose seeking professional mental health care(1). Among the types of delusional disorder, Somatic delusions differ from other conditions with hypochondriacal symptoms. Ekbom syndrome is one such disease that falls under this category of delusional disorder. Ekbom syndrome clinically known as delusional parasitosis or delusionary parasitosis, is a somatic type of delusional disorder characterized by a false belief of being infested with parasites. The condition is eponymously named after the Swedish neurologist Karl A. Ekbom, who provided a comprehensive description in his seminal paper. ES is not a phobia, as the individual is not afraid of insects but rather convinced that they are infesting his or her body<sup>(2)</sup>. It is important to distinguish the Ekbom syndrome from Wittmaack-Ekbom syndrome, which refers to restless leg syndrome. Studies suggest an increased prevalence of this disease is seen with increased age. Some studies found a

greater incidence in females than males, but this gender prevalence did not appear in other research<sup>3</sup>. This condition arises from a significant impairment in intellectual faculties, leading to a complete loss of insight into both disease and one's self. This pathological state mirrors the concept of *Atatvabhinivesa* in Ayurveda, which describes the deep-seated misperception of reality.

Atatvabhinivesa is a disease mentioned only by Acharya Charaka. Acharya Chakrapani commented on it as a mental illness and it leads to misery in all living beings. It describes a state<sup>(4)</sup>. It describes a state in which an individual perceives falsehood as absolute truth, unable to distinguish reality from delusion. This article seeks to analyze *Trividha Bodhya Sangraha* of *Atatvabhinivesa* through the perspective of Ekbom Syndrome, providing insights into its etiology, pathogenesis, and diagnostic framework.

## Methodology:

This Conceptual Study Examined Materials From Textbooks, Research Articles, Journals, And Internet Sources. The Obtained Data Was Extensively Evaluated, And Disputed, And Conclusions Were Formed.

#### **Result and Discussion:**

#### Concept of Atatvabhinivesa:

It Is Derived From 2 Words

# Review Article

- Atatva, A + Tatva, Here, Tatva Means Truth Or Reality.
   Hence, Atatva Means False Or Delusion
- Abhinivesa, Referring To Deep-seated Belief Or Adherence To This Cognitive Distortion Leads To An Unwavering Belief In False Perceptions Forming The Core Characteristic Of Atatvabhinivesa In Ayurveda.

#### Concept of Ekbom Syndrome:

Ekbom Syndrome Is A Rare Illness In Which People Have The Erroneous But Unwavering Conviction (delusion) That They Are Infested With "bugs" Such As Parasites, Worms, Germs, Mites, Or Other Living Creatures. Ekbom Syndrome Is Known By Various Names That Include Delusory Parasitosis, Psychogenic Parasitosis, Delusional Infestation, Delusional Ectoparasitosis, Formication, Chronic Tactile Hallucinosis, Dermatophobia, Parasitophobia, And Cocaine Bugs<sup>(5)</sup>.

### Trividha Bodhya Sangraha:

Acharya Charaka's Explanation Of *Trividha Bodhya Sangraha* Represents A Comprehensive Approach That Covers All Pathologies.

The Trifecta Comprises Of

- Samuthana Vishesha (etiology)
- Adhishtana Antarani (pathogenesis)
- Vikara Prakriti (clinical Presentation)<sup>(6)</sup>.

## Samuthana Vishesha:

- Habitual Intake Of Impure Food
- Suppression Of Manifested Natural Urges
- Excessive Intake Of Hot-cold, Unctuous, Un-unctuous Food (incompatible Food With Contradictory Properties)
   Are The Root Causes And Triggers Of Atatvabhinivesa<sup>(7)</sup>.

Unprocessed Meat And Other Impure Foods Raise Dopamine Levels In Post-synaptic Receptors, Which Causes Psychotic Illnesses. Because *Vata* And *Manas* Are Intertwined, Suppressing One's Natural Desires Exacerbates One's *Vata Dosha. Mano Dosha Rajas* And *Tamas* Are Also Aggravated By *Vata* Disturbance. Overindulging In Food, Which Is The Reverse Of What Is Needed, Is Linked To Drug Misuse, Such As Alcohol Or Cannabis, Which Can Lead To Delusion And Hallucinations<sup>(8)</sup>.

The Fundamental Etiology Of The Condition Is Typically Unknown, And It Manifests As Primary And Secondary Delusional Parasitosis. However, It Is Also Claimed That Elevated Dopamine In The Striatum Of The Brain May Cause Primary Delusional Parasitosis. Reduced Dopamine Transporter (dat) Function Is The Cause Of This. Substance Misuse Or A Medical Issue Like Hypothyroidism Could Be The Secondary Cause. Emotional Strain, Stress, And Worry May Also Act As Triggers. (3,9)

### Adhishtana Antarani:

Pathophysiology Of *Atatvabhinivesa* Is Explained As *Rajas* And *Tamas*, Which Are Mental Attributes Of Mind Obscure A Person's Self. Excessively Aggravated *Rajas* And *Tamas* Cover *Manas* (mind) And *Buddhi* (intellect), Disturbing The Functions Of *Hridaya* (heart), Making The Person *Moodha* (ignorant) And *Alpa Chetana* (mentally Weak). Thus, There Is A Total Disruption Of Intelligence, The Higher Part Of The Mind That Causes Aberrant Mental Activity. Thus, Acharya Charaka Regards *Atatvabhinivesa* As *Mahagada*<sup>(10)</sup>.

The Pathophysiology Of Delusions Of Parasitosis Is Poorly Characterized. One Proposed Mechanism Is That Decreased Functioning Of Dopamine Transporters Which Normally Transport The Extracellular Dopamine In The Striatum Of The Brain May Lead To An Increase Of This Neurotransmitter<sup>(11)</sup>.

#### Vikara Prakriti:

On Manifestation Of *Atatvabhinivesa* The Most Crucial Part Of The Mind Will Be Damaged Making The Person Have Improper Judgment Regarding Eternal And Ephemeral Events And Wholesome And Unwholesome Objects<sup>(12)</sup>.

The Condition Of Ekbom Syndrome Or Delusional Parasitosis Is Characterized By The Matchbox Sign Which Explains The Common Phenomenon That Occurred Patients Suffering From This Condition. During Their Clinical Session, The Patient Would Present With Peeling Skin And Other Items Connected To Delusional Thinking In An Empty Old-fashioned Matchbox As Proof That They Were Infested With Insects. Delusional Parasitosis Has Been Described In Association With Many Physical Illnesses Such As Vitamin B12 Deficiency, Pellagra, Neurosyphilis, Multiple Sclerosis, Thalamic Dysfunction, Hypophyseal Tumors, Diabetes Mellitus, Severe Renal Disease, Hepatitis, Hypothyroidism, Mediastinal Lymphoma, And Leprosy. Use Of Cocaine And The Presence Of Dementia Has Also Been Reported<sup>(13)</sup>.

#### **Conclusion:**

Every Disease Has An Impact On An Individual's Personal And Professional Life. Ekbom Syndrome Is One Of The Conditions That Interfere With A Person's Peaceful Existence. By Shedding Light On The Concept Of *Atatvabhinivesa* In Relation To Ekbom Syndrome, The Disease Can Be Managed More Effectively. The *Trividha Bodhya Sangraha* Of *Atatvabhinivesa* Is The First Step In The Management Of The Condition That Is, *Nidana Parivarjana*. This Article Also Aims To Unveil The Concept Of Ekbom Syndrome In View Of *Atatvabhinivesa* Which Is A Rare Phenomenon To Come Across In Day-to-day Clinical Practice.

## **Review Article**

Source of Support: Nil
Conflict of Interest: Nil

**Copyright** © 2025 PDEA'S International Journal Research in Ayurved and Allied Sciences. This is an open access article, it is free for all to read, download, copy, distribute, adapt and permitted to reuse under Creative Commons Attribution Non Commercial-ShareAlike: CC BY-NC-SA BY 4.0 license.

#### References:

- 1. Kay J, Tasman A. Essentials of psychiatry. West Sussex, England; Hoboken, Nj: Wiley; 2006.p527.
- Hinkle NC. Ekbom Syndrome: A Delusional Condition of "Bugs in the Skin." Current Psychiatry Reports [Internet]. 2011 Feb 23;13(3):178–86. Available from: https://entnemdept.ufl.edu/sepmc/handouts2015/Hinkl e HO SEPMC2015.pdf
- 3. i MN, Bragg BN. Delusions Of Parasitosis [Internet]. PubMed. Treasure Island (FL): StatPearls Publishing; 2 0 2 1 . A v a i l a b l e from: https://www.ncbi.nlm.nih.gov/books/NBK541021/
- Agnivesha, Charaka Acharya, Yadavji Trikamj Acharya editor. Charaka Samhita. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd; 1992. p.111
- KATHRYN N. SUH, JAY S. KEYSTONE, Chapter 135

   Delusional Parasitosis, Editor(s): Richard L. Guerrant,
   David H. Walker, Peter F. Weller, Tropical Infectious
   Diseases (Second Edition), Churchill Livingstone,
   2006, Pages 1700-1707, ISBN 9780443066689,
   https://doi.org/10.1016/B978-0-443-06668-9.
   50140-X.
- Vaidya Yadavaji Trikamji Acharya (editor). Charaka Samhita of Agnivesa with the Ayurveda Dipika

- commentary of Chakrapanidatta, Sutrasthana, Chapter 18, Verse no.46. 4<sup>th</sup> edition, Varanasi: Chaukhamba Surbharati Prakashan; 2016: p.108.
- Agnivesha, Charaka Acharya, Yadavji Trikamj Acharya editor. Charaka Samhita. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd; 1992. p.477
- 8. Hegde r, shetty sk. A critical analysis of Atatvabhinivesha as Mahagada, and its modern interpretation. International Ayurvedic Medical Journal [Internet]. 2021 May 15 [cited 2025 Feb 23]; 9 (5): 1050-3. Available from: https://www.iamj.in/posts/2021/images/upload/1050\_1053.pdf
- 9. Waykar V, Wourms K, Tang M, Joseph V. Delusional infestation: an interface with psychiatry. BJPsych Advances. 2020 Oct 22;27(5):343–8.
- Agnivesha, Charaka Acharya, Yadavji Trikamj Acharya editor. Charaka Samhita. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd; 1992. p.478
- 11. Huber, M., Kirchler, E., Karner, M., & Pycha, R. (2007). Delusional parasitosis and the dopamine transporter. A new insight of etiology?. *Medical hypotheses*, 68(6), 1 3 5 1 1 3 5 8 . h t t p s : // d o i . o r g / 10.1016/j.mehy.2006.07.061
- 12. Vaidya Yadavaji Trikamji Acharya (editor). Charaka Samhita of Agnivesa with the Ayurveda Dipika commentary of Chakrapanidatta, Chikitsasthana, Chapter 10, Verse no.60. 4<sup>th</sup> edition, Varanasi: Chaukhamba Surbharati Prakashan; 2016: p.477
- 13. Kay, J., & Tasman, A. (2006). Schizophrenia and Other Psychoses. In Essentials of psychiatry: Kay/essentials of psychiatry (p. 528). John Wiley & Sons.