

REVIEW ON ASTHIMAJJAGATA VATA: AVASCULAR NECROSIS OF HIP JOINT

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ABSTRACT

The term "Avascular Necrosis" (AVN) refers to the death of bone cells due to a disruption in the blood supply. The collapse of the bone structures causes bone loss, pain, and the loss of joint function. This disease most frequently affects the femoral head. At the time of diagnosis, most patients are in their third, fourth, or fifth decade of life. This illness affects men more frequently than women do. Management is not an easy task, the objectives of treatment includes the preservation of structure and function and relief of pain. In modern medicine administration of muscle relaxants, NSAIDS, physiotherapy etc give temporary relief from the pain and last option seems to be surgery which is quite expensive and has several complications. The

symptoms of avascular necrosis in a patient are comparable with the symptoms of *Asthimajjagata Vata* Basti is considered as the best in pacifying *Vata Vyadhi*; *Vyana Vayu* is vitiated in *Asthimajjagata Vata*. According to *Acharya's*, *Tiktaksheera Basti* is mentioned in the management of *Asthimajjagata Vata*.

KEYWORDS: Avascular Necrosis, *Asthimajjagata Vata*, *Tiktaksheera Basti*, *Vyana Vayu*.

INTRODUCTION

Avascular necrosis (AVN) also called osteonecrosis, aseptic necrosis, bone infarction and ischemic bone necrosis, is cellular death of bone components due to interference of blood supply because of which the bone tissue dies and the bone collapse.

Pathology of Avascular necrosis is not clearly defined but it is assumed that osteonecrosis /aseptic necrosis occurs due to various traumatic and non-traumatic causes which impairs blood circulation to the bone leading to the death of bone marrow and osteocytes, generally causing the collapse of the necrotic segment.

AVN affects the bones of a joint, which often leads to destruction of the articular surfaces. It primarily affects epiphysis of long bones and joints such as the femur, knee and hip joints.

Commonest traumatic causes are femoral neck fracture and dislocation in hip joint which include dislocation of femoral head from acetabulum. It may include variety of non traumatic causes like Chronic inflammatory conditions, sickle cell disease, smoking, trauma, high dose of corticosteroids, excess alcohol intake, infections such as human immunodeficiency virus (HIV) tuberculosis, meningococcal infections, radiation therapy and organ transplant.

AVN is a known complication after steroid treatment of severe COVID-19 infections or in long COVID-19 infections.

The disease prevalence rate is 0.135% per thousand population.^[1]

It usually affects people between 30-50 years of age.

The symptoms of avascular necrosis in a patient are comparable with the symptoms of *Asthimajjagata Vata* manifesting symptoms like *Bhedo Asthi Parvanam* (breaking type of pain in bone and joints), *Sandhi Shula* (joint pain), *Mamsa Kshaya* (muscular wasting), *Bala Kshaya* (weakness) and *Aswapna Santatruk* (disturbed sleep due to continuous pain).^[2]

According to *Acharya's*, *Tiktaksheera Basti* is mentioned in the management of *Asthimajjagata Vata*.

HISTORICAL REVIEW

Acharya Charaka has given a description about *Asthimajjagata Vata* in Ch.Chi.28/33.^[3]

Acharya Sushruta has given a description about *Asthimajjagata Vata* in Su.Ni.1/28.^[4]

In these chapter acharyas mentioned sign, symptoms, complication and prognosis of disease.

AIM AND OBJECTIVES

1. To understand *Asthimajjagata vata* in detail in comparison avascular necrosis of hip joint.
2. To understand the pathophysiology & symptomatology of *Asthimajjagata vata*.
3. To have knowledge for diagnostic criteria of *Asthimajjagata vata* according to *Ayurveda* as well as modern perspective.
4. To understand treatment and its efficacy in *Asthimajjagata vata*.

MATERIALS AND METHOD

As this study is a review type of study, we have collected information from the available Ayurvedic samhitas and few elementary text books to get comprehensive knowledge about the disease *Asthimajjagata vata* as well its line of management.

DEFINITION

Acharya Charaka was the first scholar to give the appropriate definition of *Asthimajjagata Vata*. *Asthimajjagata Vata* manifesting symptoms like *Bhedo Asthi Parvanam* (breaking type of pain in bone and joints), *Sandhi Shula* (joint pain), *Mamsa Kshaya* (muscular wasting), *Bala Kshaya* (weakness) and *Aswapna Santatruk* (disturbed sleep due to continuous pain).^[5]

HETU / ETIOLOGY^[6]

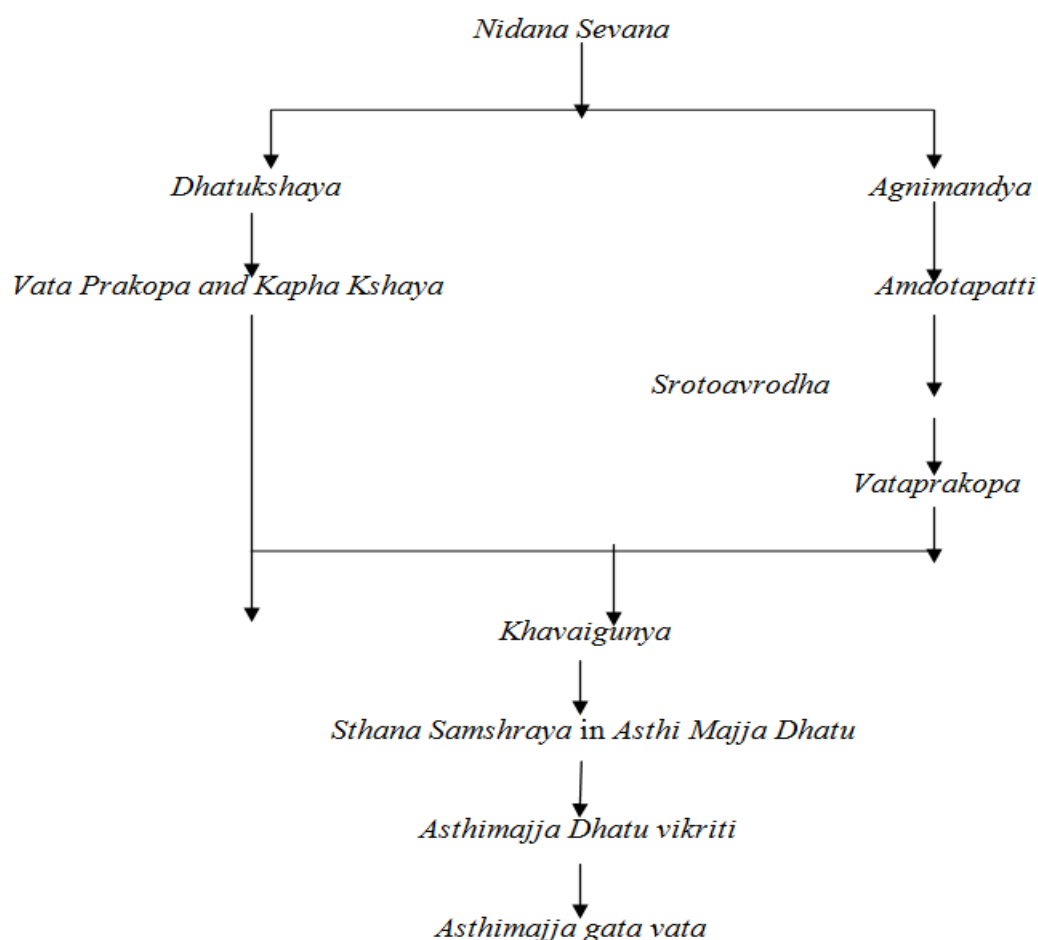
The hetu described in *Charak Samhita* for vitiation of *Vata dosha* can be divided in two main types i.e. *Dhatukshayajanya* and *Margavrodhjanya Hetu*.

Hetu Dhatukshayajanya: Because of admission of dry, cold, lacking and light food; inordinate sex, restlessness; inappropriate medicines; removal of *Dosha* (during emesis, purgation, and other treatments); or on the other hand phlebotomy, by inordinate fasting, swimming, strolling, working out, and actual work, consumption of body tissue, stress, melancholy, outrageous weakness due to extended sicknesses; using seats or beds that are uncomfortable; rage, daydreaming, or even fear; avoiding food, indigestion, trauma, suppressing natural urges; injury to indispensable regions, tumbling from quick moving elephant, camel or horse (quick vehicles) and so on.

Vata is *Prakupita* by any means, these *Hetu* are to blame for the loss of body tissue. This vitiated *Vata* gets filled in the vacuous directs in the body and prompts different summed up or limited problems.

Hetu Margavrodhjanya: Hetu which lead to development of *Aama* are remembered for *Margavrodhjanya Hetu*. Obstacle to the different channels due to *Kapha*, *mala* and so on. can be incorporated into *Margavrodhjanya Hetu* as well.

SAMPRAPTI OF ASTHIMAJJAGATA VATA



SAMPRAPTI GHATAKAS- A vast number of factors invariably take part in the manifestation of disease and are collectively known as *Samprapti Ghatakas*.

The *Samprapti Ghatkas* of *Asthimajjagata Vata* are

Dosha: *Vata*

Dushya: *Rasa Rakta Asthi Majja*

Adhistan: *Asthi Majja*

Srotas: *Asthivaha, Majjavaha*

Srotodushti: *Sanga*

Agni: *Vishamagni*

Vyadhi swabhav: *Naveen- Mridu Jeerna- Daruna*

Sadhyasadhyta: *Naveen- Saadhya / Krichhasadhya Jeerna- Yapy / Asadhya*

RUPA (Sign and Symptoms)^[7]

The symptoms of *Asthimajjagata Vata* in classical text are:-

- *Bhedo Asthi Parvanam*
- *Sandhi Shula*
- *Bala Kshaya*
- *Aswapna Santatruk*

Sapeksha Nidana (Differential Diagnosis)

The diseases such as *Sandhigata Vata*, *Aamvata*, *Gridhrasi*, which look similar to *Asthimajjagata Vata* are to be differentiated from it.

Upashayanupshaya

The factors which provocative for *Asthimajjagata Vata* such as *Ruksha Aahar Sevan*, *Sheeta Aahar Sevan*, *Adhyasana*, *Upvasa*, *Vegadharan Varsha Ritu* etc are considered as *Anupshaya* for disease.

And *Ushnoupchara*, *Abhyanga*, *Pathyaahara*, etc factors which bring vitiated *Vata* in to normal state known as *Upshaya*.

Chikitsa of Asthimajjagata Vata

Acharya Charaka has mentioned *Basti* as an excellent treatment for *Vata*, and *Ardhachikitsa* for all *Vyadhi*.^[8] (Ch.Si.1/39).

According to *Acharya's*, *Tiktaksheera Basti* is mentioned in the management of *Asthimajjagata Vata*.^[9]

Commonly Prescribed Medicine in Asthimajjagata Vata

Rasnasaptak kwath

Rasnadi kwath

Mahayograj gugglu

Agnitundi vati

Vaatakulantak ras

Eranda paka

DISCUSSION AND CONCLUSION

In the *Ayurvedic* classics, *Asthimajjagata* vata is characterized by *Bhedo Asthi Parvanam*, *Sandhi Shula*, *Bala Kshaya*, *Aswapna Santatruk* which can be correlated with avascular necrosis of hip joint in modern medical science.

AVN is a known complication after steroid treatment of severe COVID-19 infections or in long COVID-19 infections.

The likelihood of complications, among other things, plays a role in AVN prognosis. The goals of treatment include pain relief and the preservation of structure and function, making management challenging.

In present day medication organization of muscle relaxants, NSAIDS, physiotherapy and so on give impermanent help from the aggravation and last choice is by all accounts a medical procedure which is very costly and has a few difficulties.

When it comes to calming *Vata Vyadhi*, *Basti* is thought to be the best; *Asthimajjagata Vata* caused by *Vyana Vayu*.

As per Acharya's, *Tiktaksheera Basti* is referenced in the administration of *Asthimajjagata Vata*.

REFERENCES

1. A role of *Majja Basti (Dashmoola Siddha)* in the management of avascular necrosis (AVN) of femoral head: a case study by *priya pantel* world journal of pharmaceutical research, 2021.
2. *Kashinath shastri, Gorakhnath Chaturvedi*, editors. *Vidyotini, Hindi commentary of Charaka Samhita Chikitsa Sthana* chapter 28 verse no.33 Edn. Varanasi: *Chaukhambha Bharati academy*, 2020; 712.
3. *Kashinath shastri, Gorakhnath Chaturvedi*, editors. *Vidyotini, Hindi commentary of Charaka Samhita Chikitsa Sthana* chapter 28 verse no.33 2020 Edn. Varanasi: *Chaukhambha Bharati academy*, 2020; 712.

4. Kaviraaja Ambikadutta Shastri editor *Sushruta Samhita Nidana Sthana* chapter 1 and *Shloka* 30. 2012 Edn. Varanasi: *Chaukhambha Sanskrit* series publication, 2012; 189.
5. Vaidya Harishchandra Singh Kushwaha, editor. *Ayushi Hindi Vyakhya* chapter 28 and *shloka* 33 chaukhambha orientalia, 734.
6. Kashinath shastri, Gorakhnath Chaturvedi, editors. *Vidyotini, Hindi* commentary of *Charaka Samhita Chikitsa Sthana* chapter 28 verse no.15-18 Edn. Varanasi: *Chaukhambha Bharati* academy, 2020; 709.
7. Vaidya Harishchandra Singh Kushwaha, editor. *Ayushi Hindi Vyakhya* chapter 28 and *shloka* 33 chaukhambha orientalia, 734.
8. Kashinath shastri, Gorakhnath Chaturvedi, editors. *Vidyotini, Hindi* commentary of *charaka Sutra Chikitsa Sthana* chapter 28 verse no27. Edn. Varanasi: *Chaukhambha Bharati* academy, 2019; 503.
9. Kashinath shastri, Gorakhnath Chaturvedi, editors. *Vidyotini, Hindi* commentary of *Charaka Samhita siddhi Sthana* chapter 01 verse no.39 Edn. Varanasi: *Chaukhambha Bharati* academy, 2020; 893.