ROLE OF PANCHATIKATA KSHEER BASTI IN THE MANAGEMENT OF AVASCULAR NECROSIS OF HEAD OF FEMUR: A CONCEPTUAL STUDY

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ABSTRACT
A vascular necrosis is also called osteonecrosis or bone infarction, aseptic necrosis, and ischemic bone necrosis, is cellular death bone due to interruption of blood supply. Lack of blood supply may be due to damage or obstruction in vascular pathway. AVN may be traumatic, non traumatic and may be due to chronic use of steroid. AVN also may be associated with some metabolic disorder, SLE, sickle cell anemia and alcohol intake. AVN is also known as Osteonecrosis / Osteochondritis Dissecans /Candler’s disease. AVN first described by Munro in 1738. AVN mostly involves end (epiphysis) of long bone such as end of femur and humor bone but it may involve small bones also. Some allopathic medicines are NSAIDS (Ibuprofen, Diclofenec salt), Osteoporosis drug, cholesterol lowering agent, anticoagulant, vasoactive substance, blood thinner and phosphate. In Ayurveda panchatiktaksheerbasti is the main treatment for AVN or asthimajjagattavata.

KEYWORDS: Avascular necrosis, Panchatikta ksheer basti.

INTRODUCTION
A vascular necrosis is cellular death of bone component caused due to blockage or destruction in blood vessels of bone which supplies oxygen, nutrition to the bone tissue. In a vascular necrosis without supplement of nutrition and oxygen bone tissue start die or necrosis. That causes atrophy erosion and deformity in bone shape. It mainly involves epiphyses of large bone such as head of femur. Osteonecrosis may be due to trauma or other metabolic disease. Condition associated with AVN, disease such as diabetes mellitus, chronic uses of steroid, sickle cell disease and alcoholism. AVN is 4 times more common in man then women. Most experts believe that it is the result of the combined effects of genetic predisposition, metabolic factors, and local factors. Head of femur bone has very fine line dense blood circulation. It has also supportive structure for any occlusion (Fat emboli, gas emboli, or thrombi). Hip joint is weight bearing joint so there is always chances of femur fracture or dislocation due to trauma.

GENERAL INTRODUCTION
A vascular necrosis occurs where blood supply to the bone tissues damages and ischemia occurs in bone tissue and that causes severe pain. Common symptoms of AVN in head of femur are pain in lower back region, prickling pain in hip, difficulty in climbing stairs, limping during walking or caring load. AVN affects long bone head of femur mostly, hip joint. It decreases wait bearing power of the bone. So AVN decreases quality of life and patient faces difficulties in normal work also. The exact prevalence of osteonecrosis is unknown. In the United States, there are an estimated 20,000 to 30,000 patients newly diagnosed each year with even larger numbers worldwide. AVN in advance condition surgical procedures such as drilling, insertion of bone grafts, osteotomy and operation of hip replacement are performed.

LITERATURE REVIEW CORRELATION
In Ayurveda a vascular disease correlate with clinical features of Asthi majjagata vata. Bheda-asthiparvanam (breaking type of pain in bones), sandhishula (joint pain), mamsabalakshaya (loss of strength and muscles weakness), salata ruk (continues pain in nature), and asvapna (disturbed sleep), which can correlate with the symptoms of AVN.

PATHOPHYSIOLOGY
AVN in initial stage it is very mild level but as the time passes the disease begin worse pain occurs severely. The affected area become destroys and at the end totally bone collapse occurs. AVN is caused by traumatic and non traumatic factor which reduces or block blood supply to the bone. AVN may be due to vascular damage,
increased intra-osseous pressure, metabolic factors, and mechanical stress.

In non traumatic pathway the main causes are glucocorticoids, alcohol, Fat emboli, Gaucher’s Sickle cell, hemoglobin apathy, Coagulopathy (Antiphospholipid antibodies, inherited thrombophilia), hypofibrinolysis Drugs. This entire factor has chances of occlusion in intravascular system that can develop AVN. Infection and arthritis also can complicate AVN. AVN mostly involves long bones epiphysis of femur and humor bone, hip joint, shoulder head but it also involves knee joint, hand bones (carpals), foot bone (talus).

Due to abhighat (trauma) causes rakta dhatu dusti. Usana, Ati adhav, alpa rukashaahara vihar (Lack of nutritious food, excessive walking, exertion) asapavana (lack of sleep, lack of rest) causes asthi dhatu shaya, vitiation of vata, majjashaya, and vataprakop. Vitiation of vata and rakta dusti causes shrotoavrodh. Finally this all leads to AVN or Asthimajjagata vyadhi.

**DISCUSSION**

**MODE OF ACTION OF PANCHATIKATA KSHEER BASTI**

Panchatiktas ksheerbasti mainly used in asthigata vikar. Asthi dhatu is the sthan of vata. Asthi has khar guna. In asthigata vikar if asthi dhatu decreases vata dosha increases. AVN is correlated with asthimajjagata vata vyadhi. There is asthi dhatushaya (bone degeneration), and rakta dhatushaya (lack blood supply to bone) so there is highly increases stage of vata. There should be need vata shaman kriya. Basti is the best for vata shaman chikitsa due to reaching in pakwashaya, and ksheer has vihara guna for asthi dhatu, tikata ras has property of shrotoshodan kriya. (Tikat ras dravya mentioned to use in asthigata vyadi also) Basti chikitsa is frist treatment for vata dosha then pitta, kapha and rakta dosha. Panchatiktaksheer basti is the best therapy for AVN or Asthimajjagata vata vyadhi. It has a very good effect in AVN or asthimajjagata vata vyadhi and astigata vikar.

**SAMPRAPTI GHATAK**

Dosha – Vata Kapha
Dushya – Rakta, masa, asthi
Srotas – Raktavaha srotas
Adhishan – Sandhi, twak, masa, asthi, pratayang, kandara, sira, sanayu
Srotodusti prakar – Sang, vimargaman
Savbhav – Chirkari
Sadyata-asadaya – KrichaSadya/Yapya

**INVESTIGATIONS**

X-ray, MRI, CT scan, Bone scan, Bone biopsy, CBC, HLA B27, and hematological test are required.

**MANAGEMENT**

To prevent these all complications, proper management of the patient’s life style and treatment are required immediately. Rest of affected part and aid the crutches or walker for AVN in hip joint gives huge pain relief and prevents much mechanical destruction. Exercise only advised by physiotherapist, healthy low cholesterol diet.

Panchakarma – Panchakarma treats disease from the basic level, so result is satisfactory more than allopathic treatment. Mrudu Snehan (light massage) with Ksheerabala Taila, Swedan (fomentation) with dhashmula nadi sweda) Nirgudi patra potali at lumber region and hip region & thighs was done. Kati basti by Mahanarayana taila, Prapotali sweda, Parishaksveda, kala basti, Asthi shrihalagata guggulu, Arjun sheer pak, Pathay bhijnan nidan purvarjan

In ayurveda, Panchatiktaskheer basti is the main treatment for avascular necrosis. In Panchatiktaskheer basti per anal rout administration of medicated oil (krimigane, vranrapan quality) is recommended for Asthimajjagata vikar. Panchatikat ksheer basti has very good effect in bone loss, bone desiccation and bone necrosis.

Other treatment of avascular necrosis- In Ayurveda uses Panchatikta guggulu, Lakshadi guggule, Prasarni taila, Mahamanjisthadi kwath, Arogyavardani vati, and Rasrajeshar ras.

**CONCLUSION**

Awareness should be created for role of Panchakarma in initial stages of the disease to check the progression. Conservative management of AVN through ayurvedic principles provides significant relief and improves quality of life.

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