TITLE: AN AYURVEDIC PERSPECTIVE TOWARDS AVASCULAR NECROSIS: A CASE STUDY

SNEHAL S.SHERIKAR¹, MINAL S. VAIDYA²
AN AYURVEDIC PERSPECTIVE TOWARDS AVASCULAR NECROSIS: A CASE STUDY

1 SNEHAL S.SHERIKAR, 2 MINAL S. VAIDYA

1MD Scholar , 2Professor & HOD, Department of Kayachikitsa, Y.M.T. Ayurvedic College Kharghar, Navi Mumbai.

ABSTRACT:

Avascular necrosis (AVN) is a progressive disorder with surgical intervention as the prime choice. AVN is a condition affecting different bones as a result of transient / permanent loss of blood supply to the bones. Eventual collapse of the bone tissue and its death is the resultant of the ischemia along with its overlying joint surface. Necrosis is caused due to arterial occlusion and femoral head is the most commonly affected area. Progressive increase of the pain worsens with time and patient experiences pain on rest associated with stiffness.

Methods: In current study a single female patient of 35 yrs of age having signs and symptoms of AVN and MRI left hip showing AVN of femoral head was selected and pancha karma treatment was administered in 3 sessions of 21 days for 1 year.

Result: Highly significant result was observed and there was improvement in cardinal symptoms of AVN. It also provide highly significant results in improving range of movements and pain intensity.

Conclusion: This line of treatment provided a good clinical improvement in a patient with Avascular Necrosis.

Key words: AVN, Panch tikta ksheer basti, Sarvanga Snehan, Sarvanga Swedan

INTRODUCTION

Avascular Necrosis (AVN) in which there is cellular death of bone tissue due to interruption of the blood supply due to injury or any occlusion in the blood vessel nourishing the bone tissue.
Avascular Necrosis of femoral head is most common type of necrosis affecting the bones. The arteries supplying the femoral head are very narrow & hence are easily liable to injury. Other causes include chemotherapy, alcoholism, excessive steroid use, arterial embolism, thrombosis, sickle cell anemia, rheumatoid arthritis & Lupus.

AVN may be asymptomatic in the beginning but later mild to severe degree of pain is seen along with change in gait. Management is not an easy task, the objectives of treatment includes the preservation of structure & function & relief of pain. Many surgical procedure like core decompression by drilling the hole in the bone & implantation of living bone chip & an electric device to stimulate new vascular growth. And vascular fibular graft is carried out. All these procedures are cost effective & prognosis is very poor. In above case Ayurvedic Therapy (Ayurvedic formulation & Basti karma) has been very successful by reversing the main pathology by improving and normalizing the blood circulation to the head of hip joint. Also this therapy is very successful in treating the symptoms such as pain, impaired mobility, stiffness. Above therapy has given for about 21 days for every 3 months for 1 year.

CASE REPORT

A 35 year old female from Pen Tal- Panvel, Dist- Raigad, Maharashtra. Presented with pain in left groin, hip (grade of 10 scale) & knee and the MRI hip shows left hip AVN with changes causing distortion & subarticular irregularity seen in left femoral head with mild joint effusion came in opd no 1 of Y.M.T. Ayurvedic College Kharghar, Navi Mumbai.

On examination range of motion of left hip was limited & painful in all range.

INVESTIGATION
1. CBC- within normal limit
2. MRI- Left hip AVN with distortion & subarticular irregularity in left femoral head.

ASSESSMENT CRITERIA

1. Universal pain assessment tool
2. GRADATION OF SYMPTOMS

1. SandhiGraha (Stiffness)
   - 0- No stiffness
   - 1- Stiffness for 30 min
   - 2- Stiffness after sitting & walking for long time
   - 3- Stiffness whole day or whole night

2. Sparhasahyata (Tenderness)
   - 0- No tenderness
   - 1- Pain on pressure
   - 2- Patient winches on pressure
   - 3- Patient winches & withdraws the affected part.

3. AkunchanPrasaranjanyaVedana (Restricted movements of joints)
   - 0- No Restriction
   - 1- Partially Restriction
   - 2- Fully Restricted

5. Gamankshtata (Walking distance with pain)
   - 0- No pain while walking
   - 1- Mild pain while walking
   - 2- Moderate pain while walking
   - 3- Severe pain while walking

Following treatment was started for 21 days

The whole treatment protocol has divided in to 3 sessions, with interval of 3 months in between sessions. The same following treatment has given in each session.

Patient has been admitted for same treatment every time.

1. Deepan and Pachan treatment was adapted by administration of Hingwashtakchurna for 2 days to relieve ama symptoms.
2. Sarvanga snehan, sarvanga swedan and Yoga basti karma for 8 days.
3. From 9th day Sarvangasnehan, sarvanga swedan and Panchatikta ghrit ksheera basti for 14 days.

OBSERVATION & RESULT

After 1st session

Groin pain has shifted to lower grade (7-9 scale i.e. severe pain). Stiffness grade shifted to grade 1, but there is no changes in tenderness (grade-4), gamankashtata (grade -3), restricted movements (grade-2).

After 2nd session moderately groin pain had relieved (5-7 scale), no stiffness, tenderness (grade-3), gamankashtata (grade-3), restricted movements (grade-1).

After 3rd session markedly pain relieved (3-5 scale), gamankashtata (grade-2), No restricted movement, no stiffness.

DISCUSSION

Avascular necrosis can be correlated with Asthi – majjagat vata. Ayurvedic pathogenesis of AVN is as follows:

Rakta dhatu supply to the femoral head is decreased. It leads to decreased nutrition supply to that part and reduction in density (asthi dhatu kshay). As majja resides in asthi dhatu, it may further results in majjadhatu kshay.

Hingwashtakchurna was administered to increase the appetite as it contain hingu, trikatu, ajmoda, saindhav, jirak, krushna jirak which is katurasatmak, ushnaviryatmak, these qualities increase jatharagni and help to regulate apanvayu, as the Kati, Sakthi are mentioned as site of Apan Vayu.

Treatment was started with Yogbastikrama for the purpose of whole body shodhan.

As Charakacharya had explained in sutras than about asthigat roga chikitsa is tikta dravya siddha ghrit ksheer basti. Panchatikta ghrit ksheer basti was planned for strengthening of asthi dhatu. Tikatacas has predominance of Vayu and Akash mahabhautiktatva. All the ingredients of panchatikt (Nimba, Patol, Kutaki, Guduchi, Kantakari) have tiktarasa, ushnaviyra, madhur & katuvipak favors normal functioning of dhatvagni, facilitating increased nutrition of fasthidhatu. As a result, degeneration of asthi and majjadhatu reduced as this treatment helped their regeneration.

Ghrit is vata-pittashamak, balya, agnivardhak, improves the
dhatuupachay. Ghrit also contain vitamin D plays an important role to utilize calcium and phosphorous from blood and helps in bone formation.\textsuperscript{5}

Ksheer has madhur and snigdha properties which help in control of vata and acts as bruhan (nourshing). Research studies on Kshirbasti proved to be efficacious in asthikshay.\textsuperscript{6}

At the end of treatment, patient had complete relief from stiffness, pain intensity reduced and graded as 3-4 scale, increased strength and range of movements and walking witnessed without support.

MRI left hip was repeated after one year of treatment but there was no improvement in the MRI as compared to the previous MRI findings. On the other hand there was no further structural damage to the left hip joint.

CONCLUSION

This case study discussion support the Ayurvedic textual reference i.e. Asthi vaha and Majjawaha Srotas Chikitsa.

It states the use of Tikta rasa, ghrita ksheer in Asthi and Majjavaha Srotas dushti. After the above symptoms were relieved and no side effects were seen.

Above all, MRI finding after treatment does not reveal further damage which suggests that this treatment helped to limit the disease. If same treatments is given to patient for few more years, we could find improvement in MRI also.

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