

Emergency pain management in Avascular Necrosis with internal administration of Mahathikthaka ghee - a case report

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Abstract

Emergency pain management in Avascular Necrosis (AVN) along with the prevention of further degeneration of bone is now emerging as a major challenge in the field of medical research. 52 year old male patient presented with intense pain in right hip radiating towards groin and anterior aspect of right thigh since one and a half years. Exacerbation of pain noted especially during climbing of stairs and walking. Examination revealed tenderness (Grade 2) at right hip.

The patient had given internal administration of *Mahathikthaka ghee* for 9 days in increasing dose pattern which showed a reduction of pain from 8 to 2 in Visual Analogue Scale (VAS).

Keywords: Avascular necrosis, *Mahathikthaka ghee*, Pain management

Introduction

Avascular Necrosis¹ or osteonecrosis leading to death of bone tissue presents very often with severe pain in the site. The major challenge before any health professional is to prevent further bone loss and effective pain management. Ayurveda offers effective strategy in achieving the above mentioned two targets. The strategy comprises two elements; *Snehapaana*² (therapeutic schedule of internal administration of medicated ghee/oil) and the medicine *Mahathikthaka ghee*³.

Case report

52 year old male presented with severe pain in right hip radiating towards groin and anterior aspect of thigh. The patient experienced severe pain evident from the limbing gait when he came to OPD. The pain had a history of one and half years with

a gradual evolution and insidious onset. There was no history of trauma, dislocation or fracture. The patient was undertaking corticosteroids for the past two years for skin pathology. The pain was exacerbated while walking and climbing stairs and showed a slight relief while lying down. He was under continuous intake of analgesics which gave a temporary relief during the time of intake.

Examination revealed tenderness (Grade 2) at right hip. There was no raised local temperature and swelling. The pain was very severe with restricted Range Of Motion (ROM) especially in abduction, flexion and internal rotation of Right Hip joint.

Blood Examination revealed normal ranges of blood glucose and lipid profile. X-ray Hip (AP and Lateral) showed degenerative changes in femoral head with reduction in joint space. MRI (Spine and Pelvis) revealed

Avascular Necrosis of right hip joint with thinning of articular cartilage without femoral head collapse.

The pain was recorded in Visual Analogue Scale (VAS)⁴ as 8 on standing and on climbing stairs. The pain decreased to 6 in VAS Scale while lying down.



Figure 1: X-ray Hip joint (AP View).



Figure 2: X-ray Hip (AP view) taken 6 months after treatment.

Management

The management strategy planned was internal administration of medicated ghee, *Mahathikthaka ghee* under controlled conditions. Prior to administration, appetite and bowel habit, physical and mental strength of patient was recorded along with the consideration of season. After analyzing all these factors, the dose of first day was fixed to be 30 ml.

The patient was educated about his disease and treatment procedure. His vitals were checked before the administration of

medicated ghee which was found to be within normal limits. He was asked to satisfy natural urges before the administration of medicated ghee. The medicated ghee was given in empty stomach in the morning when the patient begins to feel appetite and previous day's meal got digested. He was advised to remain in bed after the intake of ghee and advised to take very little amount of hot water whenever felt drying of mouth. Food was restricted till he got appetite and a clear belching. The belching was tested by asking him to drink 25 ml of hot water when he felt appetite.

He was advised to take broken rice gruel diet with more water content as the first diet during the entire treatment period which is easily digestible. The food taken in the entire treatment period should be luke warm with more water content which is not too dry or unctuous. He was advised to restrict cold and junk foods, oily foods, fast foods and heavy diet completely during the treatment period. He was also advised to restrict cold water baths, journeys, exposure to wind, rain and direct sunlight, sexual intercourse during treatment period. He was asked to monitor the changes happening to his fecal matter, appetite and skin during the entire treatment period.

The time of appetite was recorded and accordingly dose of next day has been increased. The dose of ghee increased upto the dose when the patient felt appetite only after 6 hours of ghee intake and the fecal matter began to appear as sticky and unformed. The patient felt appetite only after 6 hours of intake on day 7 at a dose of 105 ml of ghee and that dose was maintained upto complete subsidence of pain.

The patient showed a decrease of pain from 8 to 2 in VAS scale on walking and climbing stairs and complete subsidence of pain (VAS 0) in lying position within a period of 7 days. Radiograph was taken after 6 months of treatment which showed no further destruction. The treatment assured

symptomatic relief to a high level along with increased quality in ADL (Activities of Daily Living).

Table 1: Assessment of pain in VAS scale during *Snehapaana* treatment schedule.

Day	Dose	Pain in VAS scale
Day 1	30 ml	8 (walking and climbing stairs) 6 (lying down)
Day 2	50 ml	8
Day 3	80 ml	6
Day 4	90 ml	6
Day 5	95 ml	4
Day 6	100 ml	4
Day 7	105 ml	2 (standing and walking) 3 (climbing stairs) 0 (lying down)
Day 8	105 ml	2
Day 9	105 ml	2

Discussion

According to Ayurvedic System of Medicine, the pathology of AVN has been viewed as the increase in *vaata dosha* which get localized on bone. The qualities of *vaata dosha*⁵ like lightness (*laghu*), dryness (*rooksha*), speedy motion (*chala*) etc leading to the pathology is effectively arrested by the medium of ghee (lipid) having exactly opposite qualities. *Ayurveda* believe that the increase in *vaata dosha* will eventually lead to increase in *pitta dosha* and on combination, will lead to destruction of bone tissue. The *ghee* used here, *Mahathikthaka ghrtha* is a unique combination of 32 drugs like *Acorus calamus*, *Alstonia scholaris*, *Adathoda vasica* etc processed in twice the quantity of juice of *Phyllanthus emblica* is predominantly *thikta rasa* (bitter) which subsides the abnormally increased qualities of *pitta dosha* thereby arresting the pathology. The *ghee* processed with above drugs having affinity towards bone tissue reaches site after absorption.

The programmed schedule of administering ghee in increased quantity day by day under highly controlled clinical monitoring called as *Snehapaana* had a tremendous effect in arresting the pathology like AVN. This method of controlled administration of lipid base medicine is believed to have a multi-level action in metabolic and neuro-psychological levels which lead to decrease in pain within a short period. 6 months after treatment, radiograph was again taken which showed no further destruction of femoral head.

Conclusion

In the current scenario of increasing incidence of pathologies like AVN, the treatment schedules like internal administration of appropriate medicated ghee (*Snehapaana*) has to be tremendously explored for opening up a solid new way of management strategy in medical science which will give consistent relief from pain as well as arresting the pathology of AVN.

Conflict of interest: None

References

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