

AYURVEDIC MANAGEMENT IN RICKETS – A CASE STUDY

**Dr. Vaishalee Bade^{1*}, Dr. Anil Kale², Dr. Tirunagari Swami³, Dr. Ashish Rana⁴ and
Dr. Hanuman Kadam⁵, Dr. Bhushan Akhade⁶**

^{1,5}PG Scholar, Department of Kaumarbhritya, Govt. Ayurved College, Osmanabad,
Maharashtra, India.

²Professor and Head, Department of Kaumarbhritya, Govt. Ayurved College, Osmanabad
Maharashtra, India.

³Professor, Department of Kaumarbhritya, Govt. Ayurved College, Osmanabad, Maharashtra,
India.

⁴Assistant Professor, Department of Kaumarbhritya, Govt. Ayurved College, Osmanabad,
Maharashtra, India.

⁶Assistant Professor, Department of Shalyatantra, Mahatma Gandhi Ayurved College,
Hospital and Research Centre, Salode (H), Wardha.

Article Received on
21 June 2021,

Revised on 11 July 2021,
Accepted on 01 August 2021

DOI: 10.20959/wjpr202110-21192

*Corresponding Author

Dr. Vaishalee Bade

PG Scholar, Department of
Kaumarbhritya, Govt.
Ayurved College,
Osmanabad, Maharashtra,
India.

ABSTRACT

Kaumarbhritya branch is placed on 1st position in *Kashyapa samhita*. In *Kashyapa samhita*, *Acharya Kashyapa* described a *PHAKKA*, *KARSHYA* and *BALASHOSHA vyadhi*. These *vyadhi* are included in *kuposhanjnya vyadhi*. Rickets is due to lack of vit.D₃, Ca and phosphorus in diet or due to malabsorption disorders. The case discussed here is of 7 year old male child, who had difficulty in walking, frequently fall during walking after some distance, irritable and treatment was taken but not completed the course. Parents brought child at *Balrog Ayurveda* OPD for further management. Here, *Ayurvedic Panchakarma* treatment given with Vit.D₃ and calcium supplementation. The child had significant relief from sign and

symptoms of rickets. *Ayurvedic Panchakarma* proved to be effective in this case of rickets.

KEYWORDS: Rickets, *PHAKKA*, *Kashyapa samhita*, *Kaumarbhritya*, *Panchakarma*.

INTRODUCTION

In *Kashyapa samhita*, *Kaumarbhritya* branch is placed on 1st position for understanding the

importance of branch in the child's growth and development.^[1] In *Kaumarbhritya* definition *Acharya Sushruta* mentioned a word- *kumara bharana* means *bharana- Poshana* of child. Due to lack of proper nutrition *PHAKKA* and *BALASHOSHA vyadhi* can occurs. *PHAKKA vyadhi* was described by *Acharya Kashyapa* in *Kashyapa samhita*. *PHAKKA* means inability to walk even after one year of life. *PHAKKA* is included in *kuposhanjnya vyadhi*. *PHAKKA* disease is described by *Acharya Kashyapa* which is not limited to a single disease but it is clinical presentation seen in end stage of many chronic progressive disorders.^[2] Rickets, PEM and failure to thrive diseases where may be walking milestone delayed.^[3]

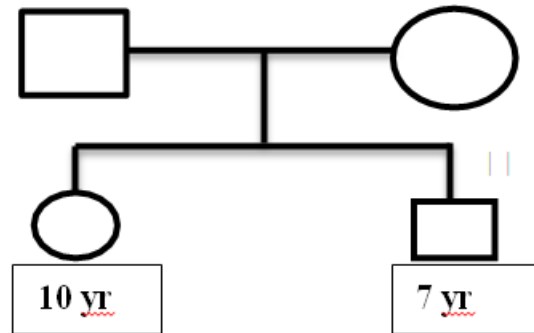
Rickets is a disease of growing bone that can cause by unmineralized matrix at the growth plates and occurs in children only before fusion of the epiphysis.^[4] Rickets occurs due to lack of vit.D₃, Ca and phosphorus, lack of moderate sun exposure and due to malabsorption syndromes. Symptoms may include delayed growth, delayed developmental milestones, bow legs, muscle weakness, bone pain, fractures and bone deformity. Rickets can be preventable in most of cases by doing proper diet, enough sun exposure or by taking vit.D₃, Ca and phosphorus rich diet. In most cases like hypophosphatemic rickets prevention is difficult.^[5] It is a significant problem in developing countries and secondary to nutritional vitamin d deficiency and low intake of calcium. Studies conducted to assess vitamin d deficiency among all different age groups in India and it revealed a widespread prevalence of vitamin d deficiency in all age groups. The prevalence ranged from 84.9 to 100% among school going children.^[6]

CASE REPORT

A 7 year old male patient born with full-term normal vaginal delivery, cried after suction having birth weight- 2.4kg. Now, he has complaints of difficulty in walking, frequently fall during walking of some distance since walking milestone achieved and irritable also. He was taken treatment but not completed the course of treatment at the age of 2 year. Parents brought child at Balrog OPD of Govt. Ayurveda hospital, Osmanabad for further management on 6/1/2021.

H/O Past illness

No H/O birth asphyxia, jaundice, seizures, sepsis H/O Ca and Vit.D₃ supplementation taken



Family history

Maternal- height-148cm

(Short stature in female <147cm) Paternal- not specific

Birth history

1. Antenatal

Iron and folic acid received

No H/O Oligohydromnios/ Polyhydromnios/ PTH/HTN USG- 2 done (normal)

2. Perinatal

Full term normal vaginal delivery, cried after suction, birth wt-2.4kg

3. Postnatal

No H/o NICU admission, seizure or jaundice

Anthropometry

Height- 105.5cm (<-3SD) Weight- 15kg (-3SD)

HC- 51 cm CC- 54cm MAC- 18cm

Immunization

Given as per schedule

Developmental milestones

Gross motor

1. Neck holding – 3m
2. Sitting without support – 9m
3. Stand with support – 12m
4. Crawling – 16m

5. Stand without support – 18m
6. Walk with support – 16m
7. Walk without support – 20m
8. Running -22m

Fine motor language social**Achieved as per age****General examination****P-** 88/min**BP-** 110/60 mmHg**RR-** 24/min**T-** Afebrile**Systemic examination****RS-** AE=BE, clear**CVS-** S₁, S₂**CNS-** conscious, oriented**P/A-** soft, non-tender**Daiagnosis-(Clinical & Investigation) Clinical**

Genu valgum + Undernourished Dental carries Irritable

Short stature

Radiological

No any abnormality seen in both Wrist and both Ankle x-ray

Laboratory

Sr.Ca – 8.8 mg%

Sr. phosphorus- 2.5 mg/dl

C.P.K. – 141 IU/L

Vit. D₃- 18 ng/ml (Deficiency)

Treatment

Sr. no.	Principle	Ayurveda regimen	No. of days
1	<i>Deepan & Pachan</i>	<i>Arogyavardhini vati & Lashunadi vati</i>	5
2	<i>Snehan</i>	<i>Tila taila</i>	60
3	<i>Swedan</i>	<i>Shalishashtic Pindasweda</i>	60
4	<i>Basti</i>	<i>Dashmooladi dravya yukta</i>	30(2cycles of 30 days)
5	<i>Abhyantar chikitsa</i>	vit.D ₃ (60,000 iu weekly)	6 week
		Ca supplement	2 month

Ahar (Diet) - Vit. D₃ and Ca rich foods, cereals, orange juice, milk, cheese, green vegetables, eggs, fatty fish, liver and finger millet (nachani) flour.

Vihar – moderate sun exposure, wearing corrective braces, play with childrens and walking

Samprapti ghatak

1. Hetu- Ahar-Vihar
2. Dosh- Vat
3. Dushya- Ras, Asthi
4. Agni- Jatharagni
5. Strotas- Ras, Asthi, Majja, Mansa
6. Strotodushti- Vimargagamana
7. Adhishtana- Asthi

OBSERVATION AND RESULT

Treatment was given to patient for 2 month and examined on 30th and 60th day. During this period patient didn't develop any other complaints.

Patient and his parents reported that child is seen happy, non-irritable, play with other child, falling frequency reduced and he is walking long distance more than before without hesitation.

DISCUSSION

As per Ayurveda principles, *Jatharaagnimaandya* correction is the 1st priority so *Arogyavardhini vati* and *Lashunadi vati* indicated for *Deepana* (Appetizer) and *Pachana* (Digestion).^[7] *Snehana* and *Swedana* improve musculoskeletal system, give strength to muscles, reduce muscle weakness and give flexibility to joints. *Shalishashtic Pindasweda* is

useful to strength, nourish and support bones, muscles, joints and nerves.^[8] *Dashmooladi dravya basti* is the best combination of drugs for alleviation of vitiated *vata*. Among the contents of *Dashamoola dravya* most of the drugs are the *Madhur rasa*, *Ushna Veerya* and *Saindhava* have *lavana rasa* and *Ushna Veerya* which plays important role in alleviation of vitiated *Vata*.^[9]

CONCLUSION

We used *Arogyavardhini vati* and *Lashunadi vati* to improve *Jatharaagnimaandya*. *Snehana* and *Pindasweda* used for muscle and bone strengthening whereas *Dashmooladi dravya Karmabasti* used for alleviation of vitiated *vata dosha* and this treatment given better result. Calcium and vit.D₃ supplementation with the Ayurvedic Panchakarma treatment shows early relief to the patient.

REFERENCES

1. Gupta Lovelesh, Acharya Shrinidhi Kumar- clinical understanding of *phakka roga* in children – a critical analysis in International Ayurvedic Medical Journal, October-November, 2016; 1(1): 47-52.
2. Gupta Lovelesh, Acharya Shrinidhi Kumar- clinical understanding of *phakka roga* in children – a critical analysis in International Ayurvedic Medical Journal, October-November, 2016; 1(1): 47-52.
3. Rohit Gadakari, Kaumarbhritya, Dhanvantari books and stationers, Nagpur, 1(26): 290.
4. ROBERT M. Kliegman, Stanton Nelson textbook of paediatrics Elsevier India private limited, edition-first south Asia, 1: 51-131.
5. <https://www.sharecare.com/health/rickets>
6. Preeti Kamboj et al. Prevalence of hypovitaminosis D in India and way forward in Journal of Medical Research, 2018; 148(5): 548-556.
7. www.jsirjournal.com
8. <https://sunshineayurveda.com>
9. www.boloji.com/articles/15582