



# IJAPC

Volume 11 Issue 2,  
2019

[www.ijapc.com](http://www.ijapc.com)

2350-0204

**GREENTREE GROUP PUBLISHERS**



## ***Sadhyasadhyatva of Vitamin B<sub>12</sub> Deficiency with Special Reference to Tail Bindu Mutra Parikshan***

Archana Amarsingh Kanase<sup>1\*</sup> and A A Muke<sup>2</sup>

<sup>1,2</sup>Department of Rog Nidan Avum Vikriti Vigyana College of Ayurved, Bharati Vidyapeeth (Deemed to be University), Pune, MS, India

### **ABSTRACT**

*Tail Bindu Mutra Pariksha* is a diagnostic tool of urine examination in Ayurveda. Tail Bindu Mutra Pariksha helps to decide prognosis of disease. It tells about Sadhyasadhyatva of disease. Vitamin B<sub>12</sub> deficiency can manifest itself as anaemia. Anaemia is defined as a decrease in the amount of red blood cells or haemoglobin in the blood. According to Ayurveda, symptoms of anaemia can be compared with Pandu. It is Pitta dominant Tridoshaja Vyadhi. This study aims at using this ancient process to diagnose Sadhya -Asadhyatva in case of Vitamin B<sub>12</sub> deficiency. **Material & Method** – 30 patients of Vitamin B<sub>12</sub> deficiency were selected randomly from Bharati Ayurved Hospital, Pune. Urine was collected in petri dish & Tila tail drop was dropped on it at the height of 1 cm. **Observation**-In all 30 urine samples Tail Bindu floats on urine. It spreads immediately. This indicates Sadhyatva of Vitamin B<sub>12</sub> deficiency. In all 30 patients shape of Tail Bindu (oil drop) was remain unchanged that is Chhatrakar shape. It suggests the dominance of Pitta Dosha in Vitamin B<sub>12</sub> deficiency. **Conclusion**- In Vitamin B<sub>12</sub> deficiency Pitta Dosha is dominant. Vitamin B<sub>12</sub> deficiency is a Sadhya condition.

### **KEYWORDS**

*Tail Bindu Mutra Parikshan, Sadhya, Asadhyatva, Tila tail.*



**Greentree Group Publishers**

Received 29/07/19 Accepted 04/09/19 Published 10/09/19



## INTRODUCTION

Vitamin B<sub>12</sub> also called as cobalamin. It is a water-soluble vitamin that has a key role in the normal functioning of the brain and nervous system and the formation of red blood cells. It is one among the eight types of vitamin B. It involved in the metabolism of every cell of the human body, especially affecting DNA synthesis. It plays important role in metabolism of fatty acids and amino acids. No fungi, Plants nor animals including humans are capable of producing vitamin B<sub>12</sub>. Only bacteria have the enzymes needed for its synthesis. Vitamin B<sub>12</sub> deficiency can manifest itself as anaemia. Anaemia is defined as a decrease in the amount of red blood cells or haemoglobin in the blood. If a person's vitamin B<sub>12</sub> levels are too low, the production of red blood cells goes down. As the red blood cells count drops, it results in anaemia. Vitamin B<sub>12</sub> deficiency is a worldwide problem. In India prevalence rate of vitamin B<sub>12</sub> in adult and elderly is 25%. Vitamin B<sub>12</sub> deficiency can potentially cause severe and irreversible damage especially to the brain and nervous system. Cobalamin deficiency is usually due to malabsorption. The only other cause is inadequate dietary intake. According to Yogaratnakar, Rognidan Ashtasthana Parikshan for proper diagnosis of disease &

disease condition, patient's different pathophysiological conditions are examined under Ashtavidha Pariksha (8 types of investigations). The Ashtavidha Pariksha includes Nadi (Pulse), Mutra (Urine), Mala (Stool), Jivha (Tongue), Shabda (Speech), Sparsha (Touch), Druk (Vision), Akruiti (Shape). Among Ashtavidha Pariksha, Mutra Pariksha (examination of Urine) has special attention in Yogaratnakar. Along with the examination of colour, appearance & consistency of urine, a special technique for the examination of Mutra i.e. Tail Bindu Mutra Pariksha was developed to diagnose disease conditions & to find out their prognosis. For this patient's early morning urine sample should be collected in a clean glass vessel. Then one drop of Tila Tail (sesame oil) is dropped over the surface of urine without disturbing the Petri dish. The pattern & the distribution of the oil drop on the urine were observed to determine the prognostic features of the disease.

1) If Vata Dosha is predominant, then the Tail drop attains Mandal (circular) shape. If Pitta Dosha is predominant, it attains Budbuda (bubble) shape. If Kapha Dosha is predominant, it attains Bindu (globule or droplet) shape & if Tridoshaj are predominant, the oil drop sinks in the urine.

2) In 'Kulaj Vyadhi' (genetic disorder) the drops take a Chalini (sieve) shape in urine



sample & then spreads. In 'Bhutadosha' the oil drop takes the image of human being or skull.

3) If oil drop spreads quickly over the surface of urine, the disease is Sadhya (curable). If the oil does not spread over the urine sample, the disease is considered as Kashta Sadhya or difficult to treat. If oil drop directly goes down & touches the bottom of the vessel, then the disease is considered as Asadhya or incurable.

4) If oil spreads in east direction, patient will get relief very soon. If oil spreads in the south direction, the patient will suffer from Jwara (fever) & gradually recovers. If oil spreads in northern direction, the patient will definitely be cured & become healthy. If the oil spreads towards the west, he will attain Sukha & Aarogya i.e. happiness & health.

5) If the oil spreads towards the Northeast, the patient is bound to die in a month's time. Similarly, if the oil drop spreads into Southeast or Southwest directions, or when the oil drop splits, the patient is bound to die. If the oil spreads on to Northwest direction, he is going to die anyway.

## MATERIAL & METHODS

We selected 30 no. of known Vitamin B<sub>12</sub> deficient patients of either sex (Table 1). Patients of Vitamin B<sub>12</sub> deficiency were asked to collect the midstream urine of the

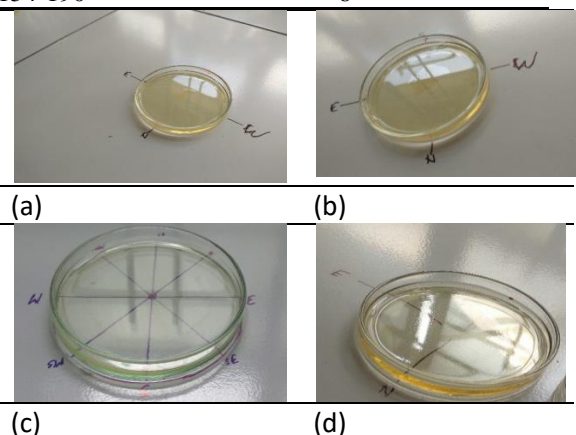
first urination of the day in a clean & neat bottle. Urine collected was poured in a Petri dish kept on a flat surface & is allowed to settle. When urine was stable, Tila Tail Bindu (oil drop) was dropped over the surface of urine (at the height of 1 mm) slowly without touching the surface by disposable plastic dropper. It was then left a few minutes & the oil drop patterns in the urine was observed. The interferences were recorded.

## OBSERVATIONS

Distribution of patients Vitamin B<sub>12</sub> values are given in Table 1.

**Table 1** Distribution of patients according to Vitamin B<sub>12</sub> values

Vitamin B <sub>12</sub> Value	No. of patients
80-116	16
117-153	6
154-190	8



**Figure 1** Tail Bindu Mutra Parikshan



Tila oil drop was settled down in Chhatrakar shape in all 30 urine sample. Til Tail drop was spread immediately over the surface of urine.

## DISCUSSION

1) If oil drop spreads quickly over the surface of urine, the disease is as Sadhya. In all 30 urine samples, oil drop was spread quickly. So, Vitamin B<sub>12</sub> deficiency is Sadhya Vyadhi.

2) In Vitamin B<sub>12</sub> deficiency dominance of Pitta Dosh is observed, because the oil drop is Chhatrakar in shape (Figure 1).

## CONCLUSION

In the present study, in majority of the patients matched with the description given in literature. Vitamin B<sub>12</sub> deficiency can manifest itself as anaemia. According to Ayurveda, symptoms of anaemia can be compared with Pandu. Pandu is Pitta dominant Vyadhi. So, in Vitamin B<sub>12</sub> deficiency dominance of Pitta Dosh is observed. Vitamin B<sub>12</sub> deficiency is Sadhya Vyadhi. The present study is basic step to know about the Sadhya -Asadhytva of Vitamin B<sub>12</sub> deficiency with the help of Tail Bindu Mutra Parikshan.



## REFERENCES

1. Achaya Yadavji Trikamji. Charak Samhita. Chaukhamba Sanskrit Sansthan, Varanasi. 2004. Pp-115.
2. Babu Suresh. Yogaratnakar, Vol.1, Chaukhambha Sanskrit Series office, Varanasi. 2005. Pp- 16-9.
3. Puvvada Suryanarayana. Chikitsasara. Vavilla Ramaswamy Shastrulu & Sons, Chennai.1927. Pp- 9-10.
4. Sharma P.V. Ayurveda ka Vaigyanik Itihas. Chaukhamba Sanskrit Orientalia. Varanasi. Reprinted. 2007. Pp-247.
5. Dr. Indradeva Tripathi & Dr. Dayashankar Tripathi. Yogaratnakar. Krushnadas Academy Varanasi. Edition 1998. Roginam Ashtasthan Parikshan. Shlok No. 1. Pp-4. Mutrapareeksha Pp-9-11.
6. Davidson's – Principles & Practice of medicine, 19<sup>th</sup> Edition (2002).
7. A study on Tail Bindu Mutra Pariksha- An ancient Ayurvedic method of urine examination as diagnostic & prognostic tool. International quarterly journal of research in Ayurveda. Year 2011-vol: 32, Issue: 1 Pp-76-81.