

Case study of *Mrudbhakshanjanya Pandu* vis-a-vis

Plummer-Vinson syndrome w. s. r. to Ayurvedic treatment.

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Abstract :

Mrudbhakshanjanya Pandu is major problem in India. Along with *kalp* (Medicines), the *Aushadh sevan kal* (Timing of dose) is equally important. Specially *Loh* (Iron) *kalp* are well absorbed in presence of *Agni* and *Pitta*. Modern science also proved that Iron is well absorbed in presence of Hydrochloric acid and HCl is secreted in abundant form in the midst of meal. So all *loh kalp* treating anaemia shall be given in *Madhyabhakt kal* that is after consuming half of your meal

Keyword:

Iron deficiency anaemia, Plummer-Vinson syndrome, *Mrudbhakshanjanya Pandu*, *Pandu*, *Loh Kalp*, Iron dosing, Haemoglobin, Serum *ferritin*, TIBC, *Navayas Loh*, *Vidang*, *Kumari Asav*, *Rasvah Strotas*, *Raaktvah Strotas*

Introduction:

Mrudbhakshanjanya pandu is major problem among Indian female population. Due to socio-economic reason this disease remains dormant among population giving rise to many further complications. In modern medicine, anaemia is treated with loads of iron supplement with multivitamin. In severe anaemia, patients are mostly advised with blood transfusion (PCV). Though it is last resort which is kept for emergency purpose only. Normal *haemopoietic* axis do content gastrointestinal tract with Castle's intrinsic factor and other co-factors as well. In Ayurveda, it has been mentioned thousands of years ago that 'Agni' or digestive power is chief source of restoration of health.

One such case which was due for blood transfusion was treated on opd basis with

satisfactory results. *Mrudbhakshanjanya Pandu* usually correlates with iron deficiency anaemia with nutritional deficiency. On occasion such chronic cases results in Plummer-Vinson Syndrome. Patients also usually complain of anaemic symptoms such as weakness, fatigue, and breathlessness. Other features may include *esophagitis*, *achlorhydria*, nail deformation that includes koilonychia or clubbing, enlargement of spleen and thyroid, dermatitis, hyperkeratosis, and visual disturbances. Other classical symptom of this disease is difficulty in deglutition due to pharyngeal pouching. Chronic long standing deficiency of Haemoglobin also results in reduction in *myoglobin*, *Cachexia* is common in *Plummer-vinson* syndrome which can *corelated* with *Vat Prakop*.

Case Report:

Female patient (age 44) came for *ayurvedic* treatment. She was diagnosed with Plummer-Vinson syndrome at modern *center* and was advised for blood transfusion. As the patient was unwilling for blood transfusion, she came for

Ayurvedic treatment with following complaints

- Breathlessness on excursion
- Difficulty in deglutition
- Loss of appetite
- Severe weakness

On Examination

- Severe pallor
- *Cachexia*
- *Koilonychia*
- Tachycardia with mild *pansystolic* murmur
- Pharyngeal pouching observed

History of Personal illness:

Patient was well before one and half year. She started having complaints of weakness and breathlessness on exertion. Soon she had complain of difficulty in deglutition. So she approached allopathic hospital. There she was diagnosed with Plummer-Vinson syndrome. She was advised for Blood transfusion. As the patient was unwilling for blood transfusion she came for *ayurvedic* treatment.

Important

blood investigation disease are as follows:

	Patient result	laboratory Normal range
Red blood cell count	2.1 cells/mcL	4.0–6.0 cells/mcL
Hemoglobin	5.5 g/dL	13–17 g/dL
Mean corpuscular hemoglobin	15.1 pg/dL	27–31 pg/dL
Mean corpuscular hemoglobin	28.9 g/dL	32–36 g/dL

concentration

Mean cell volume	52.0 fl	80.0–99.0 fl
Serum iron	20 µg/dL	50–150 µg/dL
Total iron-binding capacity	548 µg/dL	250–450 µg/dL
Serum ferritin	3.26 ng/mL	23–336 ng/mL
White blood cell count	5.3 k/mm ³	4.5–10.0 k/mm ³

Peripheral Blood smear report

- RBC- *Sev Anisocytosis* , *Poikilocytosis*, Target cell present, tear drop RBC seen
- WBC -*Hpersegmented* PMN seen

Rest of the investigation are withheld as they are not significant for post-treatment analysis

General examination

- Weight 42 kg
- BP 110/70 mm of hg
- HR 88 /pm with mild pan systolic murmur
- RR 18 /pm
- GS- cachexia seen

Systemic Examination:

- Per-oral examination – pharyngeal pouching seen, mild glossitis with stomatitis
- P/A – Mild *splenomegaly*
- RS- Clear , air entry equal on both side
- CVS- Mild *pansystolic* murmur
- CNS- conscious well oriented
- Other system – NAD
- *Ayurvedic nidan and samprapti*

- *Vat prakop ++*
- *Mrudbhakshanjanya Pandu*
- *Strotodrushti* :
Raswahstrotodrusthi,
Raktwahstrotodrusti,
Mansvahstrotodrushti

Treatment plan:

Patient was from low socio-economic class. Hence she could not afford blood transfusion or other costly treatment. But ayurvedic principles here proved very usefull with simple line of treatment.

- *Krumivighat for first 3 days*
- *Pandu chikitsa with low dose of Loh kalp*

As agni of the patient was very weak, treatment started with low dose of Loh Kalp with Kumari Asav

(A) First three days:

- *Vidang Churn 5 gm Bid (Twice a day) after meal with Anupan Madh*
- *Kumari Asav 5-7 ml before meal BID diluted in water.*
- Its well established that iron defiance anaemia should be treated with deworming without

waiting for evidence. So we started with *Vidang* churn with tolerable dose. As patient was weak with severe *Agnimandya*, doses were kept accordingly.

- *Kumari Asav* was used as patient was female and suffering from *Agnimandya* with vat prakop.

(B) First 15 days:

- *Kumari Asav* 8-10 ml before meal BID diluted in water
- Tablet *Navayas Lauh* 500 mg * OD * **Madhyabhakt (In the meal)**
- Mugd yush ; twice a day.
- Initially doses were kept low and tolerable as per Agni of patient.

- Tablet of *Navayas Loh* was strictly given in the mid phase of meal.
- In the mid phase means, completing half of her meal.
- Reason for it will be discussed in discussion.

She was adviced to make simple convenient Mugd Yush at home.

(C) Next 15 days:

Kumari Asav 10 ml before meal BID diluted in water.

Tablet *Navayas Loh* 500 mg * BID * **Madhyabhakt (In the meal)**

Mugd yush : twice a day

Result after one month

	Patient result	laboratory Normal range
Red blood cell count	2.4 cells/mcL	4.0–6.0 cells/mcL
Hemoglobin	6.6 g/dL	13–17 g/dL
Mean corpuscular hemoglobin	18.6 pg/dL	27–31 pg/dL
Mean corpuscular hemoglobin concentration	29.6 g/dL	32–36 g/dL
Mean cell volume	65.0 fl	80.0–99.0 fl
Serum iron	48 µg/dL	50–150 µg/dL
Total iron-binding capacity	488 µg/dL	250–450 µg/dL
Serum ferritin	30.1 ng/mL	23–336 ng/mL
White blood cell count	6.1 k/mm ³	4.5–10.0 k/mm ³

PBS report: Moderate Anisocytosis, Moderate poikilocytosis, tear drop rbc seen

After three months of treatment with diet management, her Haemoglobin

% was at 10.9 gm% with weight gain upto 46 kg

Discussion:

Patient came with diagnosis of Plummer-Vinson Syndrome from modern hospital. She was unwilling for blood transfusion.

As the patient was from lower socio-economic class, there was little scope for full scale ayurvedic treatment.

Importance of loh(iron) dose in madhyabhakt (after half meal)

As Loh Kalp(Iron) are guru (heavy) dravy , they need both Pitta and Agni for their digestion which is well available during Madhyabhakta Kal.

Modern medicine has also proved that iron as elemental form is digested in presence of stomach Hydrochloric acid. If iron fails to meet stomach hydrochloric acid, it remains unabsorbed & most of it is excreted via gastrointestinal tract.

In Ayurveda also, Madhyabhakt kaal is considered kaal of Pitta and saman vayu. As all Loh kalp are guru, they require both Agni and Pitta for its digestion, which is well available during Madhyabhakt Kaal.

The treatment of this patient started in low doses considering her Agni and Sharir Bal. In the beginning her weight was low, there was severe anorexia and difficulty in deglutition. As a standard treatment procedure, it started with Krumighna chikitsa (deworming) for three days. With it, her appetite was also improved. Tablet Navayas Loh was started in low doses initially. She was

given strict instruction to take Navayas Loh in Madhyabhakt Kal. Kumari Asav was used as the patient was female as well as appetiser.

Conclusion:

Along with kalp (Medicines), the Aushadh sevan kal (Timing of dose) is equally important.

Specially in the treatment of Paandu(Anaemia), Aushadh Sevan Kal (Timing of dose) is critically important. Loh kalp(Iron derivatives) are well absorbed in the presence of HCL. And HCl in stomach is secreted only after consuming diet. So while treating anaemia, Loh kalp should be given only in Madhyabbhakt Kal.

Dosage of such kalp shall be decided as per Agnibal, SharirBal of the patient.

With this management result can be seen within 15 days of starting of the treatment.

This patient's health was significantly improved within a month and after 3 months treatment she was in good condition.

References:

1. S. Hasan, N. I. Khan, and A. Siddiqui, "Plummer Vinson Syndrome-A premalignant condition-an overview of literature," *Journal of Medical and Dental Sciences*, vol. 1, no. 1, pp. 28–30, 2013. View at: [Publisher Site](#) | [Google Scholar](#)
2. S. S. Bakshi, "Plummer vinson syndrome—is it common in males?" *Arquivos de Gastroenterologia*, vol. 52, no. 3, pp.

- 250–252, 2015. View at: [Publisher Site](#) | [Google Scholar](#)
3. Agnivesa, Caraka, Drdhabala, Caraka Samhita, Cikitsa sthana, Panduroga chikitsa Adhyaya, 16/7-8, edited by Vaidya Yadavaji Trikamji Acarya, Reprint edition, Chaukhamba Prakasan, Varanasi, 2011.
 4. Agnivesa, Caraka, Drdhabala, Caraka Samhita, Cikitsa sthana, Panduroga chikitsa Adhyaya, 16/1416, edited by Vaidya Yadavaji Trikamji Acarya, Reprint edition, Chaukhamba Prakasan, Varanasi, 2011.
 5. Madhav Nidana Madhukosh Vyakhya by Ayurveda Acharya sh. Sudershan Shastri Utrardh Chaukhambha Sanskrit sansthan, Edition Fifth, chapter, 8: 8-10.
 6. Robbins & Cortan pathological basis of diseases, south asia edition, volume, 1. 5. Textbook of Pathology, Harsh Mohan, Sixth Edition, Section, II: 298-299.
 7. Ambikadatt Shastri, Sushruta Samhita of Sushruta with Ayurveda Tatva Sandipika Hindi Commentary, Uttar Tantra Reprint edition; chapter 44 versus 5, Varanasi: Chaukhambha Sanskrit Sansthana, 2013; 363.

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