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A Clinical Study of *Bala Chitraka Churna* with *Sthiradi Paneeya* in *Vataja Pandu* (Anaemia)

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Abstract:

Pandu, mentioned in *Charak Samhita*, can be termed and correlated with Anaemia. *Grahani Avayava Dushti* and *Agnimandya* causes deficiency of nutritional factors essential for haemopoiesis. Due to deficiency of blood, colour of body becomes *Panduvarna* and *Panduroga* gets developed. In modern science anaemia is a state in which blood haemoglobin level is below normal range. In such condition iron supplements are given orally and permanently specially in iron deficiency anaemia.

In Ayurveda *Agnidipak*, *Pachak*, *Raktashodhak* and *Virechak* drugs are used to cure *Pandu*. *Chitraka* is best *Agnideepana Dravya* which helps to attain proper metabolism. *Bala* with its *Dhatuposhana* and *Brumhana* properties nourishes *Shaithilya Dhatu* of *Pandurogi*. Also tissue nourishing *Sthiradi Paneeya* is *Pathya* in *Pandurogi* for drinking and food purposes. Hence to provide effective, economical and simple management of *Vataja Pandu* (Anaemia) the present clinical research work was proposed to evaluate role of *Bala-Chitraka Churna* with *Sthiradi Paneeya* in cases of *Vataja Pandu*.

A single blind non comparative study was conducted on 30 patients of *Vataja Pandu*(Anaemia) and statistical analysis showed that *Netra*, *Twak* and *Nakha Pandutva* (Whitish discoloration Of eyes, skin and nails) reduced to 60%, *Agnimandya* (Loss Of Appetite) to 60%, *Daurbalya* (Debility)to 66.66%, *Padashotha* (Pedal oedema)to 65.38%, *Shwasa* (Dyspnoea) to 63.63%, *Hritspandana* (Palpitation) to 57.14%, *Pindikodweshtana* (Calf Muscle Cramps) to 65.38%, *Akshikutha Shotha* (Periorbital Oedema) to 60.71%, *Gatrashula* (*Body aches*) to 62.96% and *Bhrama* (*Vertigo*) to 65.21%. It tends to maintain normal levels of HB%, total leucocyte count, Polymorphs, Lymphocytes, Eosinophil and Monocytes in blood.

Keywords: *Pandu*, *Bala*, *Chitraka*, Anaemia, *Sthiradi Paneeya*

Introduction:-

Panduroga is described in ancient Ayurvedic texts - *Charaksamhita*, *Sushrutsamhita*, *Ashtanghridya*, *Madhav Nidan* in the context of *Kamala Pandu* is the condition which affects the *kanti* of body to white due to discolouration. The disease in which colour of body becomes whitish like that of pollen grains of the flowers of '*Ketaki*' is called *Panduroga*.

पाण्डुस्तु पित्तभागार्धः केतकीधुलीसंनिभः। शब्दार्णव

In developing countries like India, due to nutritional deficiency, large population is suffering from various nutritional deficiency diseases. *Pandu* is one of the important diseases among such pathogenesis. Along with nutritional deficiency *Pandu* can be also produced by acute or chronic blood loss through gastrointestinal tract, urine, menstruation and frequent labours.¹

Samanya Nidan of *Pandu* includes²

क्षारास्त्रलवणात्पुष्पाविरुद्धासात्म्यभोजनात् ।
निष्पाव माष पिण्याक तिल तैल निषेवणात् ॥
विदग्धेऽन्ने दिवास्वप्नाद् व्यायामान्मैथुनात्तथा ।
प्रतिकर्मतुर्वैषम्याद्देवानां च विधारणात् ॥
कामचिन्ताभयक्रोधशोकोपहतचेतसः।

C.S.Chi.16/7-9

Pitta get aggravated and *Samprapti* of *Panduroga* starts because of following reasons:

Excessive intake of alkaline, sour, saline and hot mutually contradictory food, unwholesome food, *Nishpav*, *Masha*, *Pinayak*, *Til tail*.

Sleeping during day time, exercise / sexual intercourse before complete digestion of food.

Improper administration of *Panchakarma* therapies and transgression of prescribed seasonal regimen.

Suppression of natural urges.

Samprapti of *Panduroga* is described as follows²:

दोषाःपित्तप्रधानास्तु यस्य कुप्यन्ति ध
वैवर्ण्यं भजते तस्य हेतुं शृणु सलक्षणम् ॥

C.S.Chi.16/4

When the *Doshas*, with *Pitta* being the most predominant one, are aggravated in the *Dhatus* then the *Dhatus* get afflicted. As a result they become weak and heavy, thereafter, the complexion, strength and unctuousness, and the properties of *Ojas* get exceedingly reduced on account of the vitiation of the *Doshas* and *Dhatus*. So the patient become poor in blood, fat and vitality, his sense organ become weak and he suffers from discolouration.

Types of *Pandu*:

Charaka, *Vagbhata*, *Bhavamishra* and *Madhava* have mentioned five types of *Pandu* viz., *Vataja*, *Pittaja*, *Kaphaja*, *Sannipataja* and *Mrudbhakshanajanya Pandu*.

Sushrutachaarya has included *Mrudbhakshanajanya Pandu* in the *doshaja* types of *Pandu*. Further he has included *kamala*, *kumbhakamla* and *halimaka* in *panduroga*.

Some authorities consider these as types of *Pandu* and thus mentioned eight types of *Pandu*.¹⁻⁴

Vataj Pandu Nidana and *Lakshana*:

Vata gets vitiated by the *Vayu*-aggravating diet and regimen which brings about *Krsihna pandu anga* (black and pale-yellow complexion), *Ruksha Anga* (dryness), *Aruna Anga* (reddishness of the

body), *Anga Marda* (malaise), *Ruja* (ache), *Toda* (pricking pain), *Kampa* (tremor), *Parshav Ruja* (pain in the sides of the chest), *Shiro Ruja* (headache), *Varcha Shosha* (dryness of feces), *Mukha Vairasya* (tastelessness), *Shopha* (swelling), *Anaha* (constipation) and *Bala kshaya* (Weakness).

Treatment of Pandu:

तत्र पाण्डुवामयी स्निग्धतीक्ष्णैरुर्ध्वानुलो |
C.S.Chi.16/40

Vataj Pandu is treated by *abhyantar snehapana*, *shodhana*, *aushadhi vyavstha* and *pathyapathya*. *Pathya Ghrita*, *Katukadi Ghrita*, *Darvyadi Ghrita*, *Draksharishta* is used for *snehana* and *shodhana* purpose. *Navayasa churna*, *Mandur Vatak*, *Yograj*, *Punarnava Mandur*, *Tapyadi Lauha*, *Madhumandur* are used internally. The present clinical research work was proposed to evaluate efficacy of *Bala-Chitraka Churna* with *Sthiradi Paneeya* in symptomatic relief and haematological changes in cases of *Vataja Pandu*.^{1,2} (Su.U. 44/26)

Bala Chitraka Churna with *Sthiradi Paneeya*:

As mentioned by *Sushrutacharya*, in 16th chapter of *Uttaratantra*, *Kwatha* of *Bala* and *Chitrakamula* was prescribed to the patients of *Pandu*. *Chitraka* has *Laghu*, *Ushna*, *Pachaka* and *Deepana* properties and *Bala* with its *Madhura*, *Snigdha*, *Balya*, *Ojovardhakar* properties nourishes *Shithila Dhatu* of *Pandurogi*. This combination of *Bala* and *Chitraka* has profound effect on *Jatharagni*, *Dhatvagni* and with their rejuvenation action they provide nourishment to depleted tissues. *Charkacharya* in 16th Chapter of *Chikitsasthana* have indicated *Sthiradi Paneeya* for *paana* and *Ahara* in

Pandurogi. Roots of *Shaliparni*, *Prushniparni*, *Bruhati*, *Kantakari* and *Gokshur* were used to prepare the *Paneeya kalpana*. *Sthiradi* i.e. *Laghu Panchamula* have *Kashaya*, *Tikta* and *Madhura Rasa*, *Madhura Vipaka*, *Laghu*, *Snigdha*, *Alpa Ushna* properties. *Sthiradi* acts on *Vata* by its *madhura rasa* and *Alpa Ushna Guna*.¹⁻⁴

Materials and Methods:

1) Type of study : Open non – comparative single blind study

2) Place of study:

a) Dhanwantari Ayurved College and Hospital Udgir, Dist: Latur, Maharashtra (India).

b) Shri Veerbhadreshwar Clinic, Deglur road, Udgir, Dist: Latur, Maharashtra (India).

3) Ethical Considerations: Permission from Local Ethics Committee was acquired before commencement of trial and all the guidelines were followed.

4) Sample size: 30

5) Duration of treatment: 30 Days.

6) Follow Up: Every 10 days up to 30 days. Purpose of follow up was to compare improvement of clinical signs and symptoms along with changes in biochemical investigations.

7) Inclusion Criteria: Clinically diagnosed cases of “*Vataja Pandu*” of age group 21–60 years irrespective of sex, education, religion, profession, socio-economic status were taken.

a) Clinical symptoms: *Netra*, *twak* and *nakha Pandutva* (whitish discoloration of skin, eyes, nails), *Agnimandya* (loss of appetite), *Daurbalya* (debility), *Padashotha* (pedal oedema), *Shwasa*

(dyspnoea), *Hritdrava* (palpitation), *Pindikodweshtan* (calf muscle cramps), *Akshikutha shotha* (periorbital oedema), *Gatrashul*, *Bhrama*.

(b) Specific Symptoms: Leucocyte count, Polymorphs, Lymphocytes, Eosinophil, Monocytes and Hb gm% in blood

8) Exclusion Criteria : Patients below 20 yrs of age, pregnancy, anaemia with genetic predisposition, thalassemia, sickle cell anaemia, Megaloblastic anaemia, aplastic anaemia and other diseases which create confusion in diagnosing *Vataja Pandu*(Anaemia) etc.

9) Trial drugs: 05gm of *Bala Chitraka Churna* with 15 ml *Sthiradi Paneeya* twice orally after meals.

10) Assessment Criteria: Percent improvement

- a) Complete relief: 100%
- b) Marked relief: 76 to 99%
- c) Moderate relief: 51 to 75%
- d) Mild relief: 26 to 50%
- e) No relief: <25%

Percentage of Relief =

$$\frac{\text{Before T/t score} - \text{After T/t score}}{\text{Before T/t score}} * 100$$

11) Withdrawal criteria:

- a. Side effects of the trial drug.
- b. Development of other complications during treatment.
- c. Patients who discontinued the treatment.

Results:

1. Incidence was more in 21 to 40 year of age.

2. Uneducated persons and Females were more affected.

3. Persons of *Vatapittaj Prakrati* and *Visama Agni* were more affected.

4. Poor and mixed diet (vegetarian and non-vegetarian) persons were more affected.

5. *Bala-Chitraka Churna* with *Sthiradi-Paneeya* is less effective on *Hritspandan* and is more effective on *Daurbalya* in physical symptoms.

Discussion:

This randomized clinical trial reveals that *Bala-Chitraka Churna* with *Sthiradi-Paneeya* is economical, easily available. It has exhibited *Agnideepak*, *Raktawardhak*, *Yakrutottejak* action in *Vataja Pandu*. Major adverse effect of this drug reported during course of treatment is dyspepsia and burning sensation in epigastric region.⁵⁻⁹

Conclusion:

Internal administration of *Bala-Chitraka Churna* with *Sthiradi-Paneeya* has reduced the clinical symptoms of *Vataja Pandu* (anaemia) significantly. *Pandu* is self-limiting but a dangerous and life threatening disease if ignored at the early stage. So counselling and medication within time with close supervision of the patients of *Vataja Pandu* (anaemia) by doctors is essential.

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Conflicts of interest: None declared.

References:

1. Tripathi B, editor. Charakasamhita. 4th ed. Varanasi: Chaukhamba Prakashan; 2002
2. Pande S, editor. Sushrutsamhita. 2nd ed. Varanasi: Chaukhamba Prakashan; 2004
3. Sharma PV. Dravyaguna Vigyan. Vol 2. Varanasi: Chaukhamba Prakashan; 2003
4. Shastri S, editor. Madhavanidana. 14th ed. Varanasi: Chaukhambha Surbharti Prakashan; 1996
5. Haslett C, Chilvers ER, Boon NA, College NR, Hunter JA, editors. Davidson's principles and practice of Medicine. 19th ed. New York: Elsevier; 2004.
6. Gogte VM. Ayurvedic pharmacology and Therapeutic uses of Medicinal Plants. Mumbai: Bhartiya Vidya Bhavan. 2000.
7. Mudipiri SM. A Clinical Study of Gudadi Mandoor in *Vataja Pandu* (Anaemia) University. [MD Dissertation]
8. Kuntey M, editor. Ashtanghridaya. Varanasi: Chaukhambha Sanskrit Sansthan; 2002
9. Shukla V. Kayachikitsa. Varanasi: Chaukhambha Surbharti Prakashan; 2004

Table 1: Pharmacological Properties of Various Drugs^{3,6}

<i>Dravya</i>	<i>Rasa</i>	<i>Vipaka</i>	<i>Veerya</i>	<i>Karma</i>
<i>Bala</i>	<i>Madhura</i>	<i>Madhura</i>	<i>Sheeta</i>	<i>Vatapittaghna, gives Bala to grahani, Raktaprasadana, Dhatupushti, Ojovardhana, Balya</i>
<i>Chitraka</i>	<i>Katu</i>	<i>Katu</i>	<i>Ushna</i>	<i>Vatakaphaghna, Agnideepana, Pachana</i>
<i>Shaliparni</i>	<i>Madhura, Tikta</i>	<i>Madhura</i>	<i>Sheeta</i>	<i>Tridhoshaghna, Deepana, Pachana, Brumhana, Rasa-Rakta doshahar, Dhatvagnideepana, Rasayana</i>
<i>Prushniparni</i>	<i>Madhura, Tikta</i>	<i>Madhura</i>	<i>Sheeta</i>	<i>Tridoshaghna, Shonitasthapana, Vrishya, Brumhana</i>
<i>Brihati</i>	<i>Tikta, Katu</i>	<i>Katu</i>	<i>Ushna</i>	<i>Vatakaphaghna, Deepana, Aampachan</i>
<i>Kantakari</i>	<i>Tikta, Katu</i>	<i>Katu</i>	<i>Ushna</i>	<i>Vatakaphaghna, Deepana, Rasa-Raktashodhan, Aampachan</i>
<i>Gokshur</i>	<i>Madhura</i>	<i>Madhura</i>	<i>Sheeta</i>	<i>Balya, Vrishya, Deepana, Dhatupushti, Bastishodhana</i>

Table 2: Overall patients according to age, sex, diet, *doshaj prakruti* (N = 30)

Sr. No.	Parameter	Patients		
		Class	N	%
1	Age	21-40 years	16	53.33
		41-60 years	14	46.66
2	Sex	Male	09	30
		Female	21	70
3	Economical Status	Rich	01	03.33
		Middle	12	40
		Poor	17	56.67
4	Educational status	Educated	13	43.34
		Uneducated	17	56.66
5	<i>Doshaja Prakruti</i>	<i>Vatkaphaja</i>	08	26.66
		<i>Vatpittaja</i>	18	60
		<i>Pitakaphaja</i>	04	13.34
6	<i>Agni</i>	<i>Manda</i>	19	63.34
		<i>Vishama</i>	06	20
		<i>Tikshana</i>	00	0
		<i>Sama</i>	05	16.67
7	Diet	Mixed	16	53.33
		Vegetarian	14	46.66

Table 3: Overall treatment response according to clinical symptoms (N = 30)

Sr. no.	Parameter	Before T/t	During treatment		After T/t (30 days)	Relief in %
			10 days	20 days		
1	<i>Netra,twak and Nakha Pandutva</i>	30	24	17	12	60
2	<i>Agnimandya</i>	25	17	12	10	60
3	<i>Daurbalya</i>	27	21	16	09	66.66
4	<i>Padashotha</i>	26	22	15	09	65.38
5	<i>Shwasa</i>	22	19	14	08	63.63
6	<i>Hritspandana</i>	21	17	12	09	57.14
7	<i>Pindikodweshtana</i>	26	22	15	09	65.38
8	<i>Akshikutha shotha</i>	28	22	15	11	60.71
9	<i>Gatrashula</i>	27	21	16	10	62.96
10	<i>Bhrama</i>	23	17	13	08	65.21

T/t - treatment

Table 4: Overall treatment response according to blood investigations (N = 30)

Sr. no.	Parameter	N	Before T/t	During treatment		After T/t (30 days)
				10 days	20 Days	
1	Haemoglobin %	30	7.9	8.6	9.5	10.1
2	Total leucocyte count	30	8800	8900	8800	8700
3	Polymorphs	30	61	60	60	60
4	Lymphocytes	30	35	37	36	36
5	Eosinophil	30	02	02	02	02
6	Monocytes	30	02	02	03	02

T/t - treatment