“Effect Of Dadimadi Ghrita In Pandu”[Anaemia]

Dr. Maya Ramesh Nikhate, 
P.G.Scholar 
Panchkarma dept 
C.S.M.S.S.A.College, Aurangabad,MS.

Dr. U.K. Neralkar, 
HOD Panchkarma dept. 
C.S.M.S.S.A.College, 
Aurangabad,MS.

Abstract:
Ayurveda is defined as science of life. Now a days, due to sedentary life style people are moving faster and faster, chasing money in order to fulfil day to day needs to live a better life. Fast and spicy food is in and a well balanced diet full of nutrients and antioxidant is out.

The Pandu means a white colour mixed with yellowish thing. Pandu is such a disease in which there is vivarna/change in colour of the body. Pandu/pallor of skin is first observed on the most superficial portion of the body that is skin, eyes, palate, tounge, nose, lips, palms, soles, nails, fucus also in urine. Pandu is pitta pradhan tridoshaj vyadhi in which ras and rakta mainly affected, due to malnutrition, deficiency diseases are increasing in the world.

According to W.H.O., over one third of the world population suffers from anaemia. Prevalence of anaemia in India is high because of low dietary intake, poor availability of iron. Anaemia affects a large number of women and children in developing countries.

Aim And Objective: To study the efficacy of Dadimadi grita for treating pandu.

Materials And Methods: Total 35 subjects suffering from pandu were selected. Dadimadi grita with dosage of 10 ml was administrated orally, at morning empty stomach with a cup of warm water for 30 days. this was open labelled randomized controlled clinical trial.

Results: Clinical observations in general symptoms of pandu have revealed that % of relief out of 35 subjects, 16 subject have up to 51 to 75 % relief followed by 8 subjects up to 76-100% and then 11 subjects up to 26-50 % .About Hb%, there was difference of 1gm%in 15(42.87%), up to 1.5 gm% in 10(28.56%), up to 0.5 gm % in 5(14.28%), more than 2 gm% in 3(8.57%).

CONCLUSION: This study has revealed that Dadimadi grita has good effect on pandu. As well this drug has illustrated good effect on agni (digestive power) and nourishment of whole body.

Key words: Dadimadi grita, pandu.Key message: oral administration of Dadimadi grita is effective to cure pandu.

Introduction:
Ayurveda is defined as science of life. Now a days, due to sedentary life style people are moving faster and faster, chasing money in order to fulfil day to day needs to live a better life. Fast and spicy food is in and a well balanced diet full of nutrients and antioxidant is out. Pandu is pitta pradhan tridoshaj vyadhi in which ras and rakta mainly...
affected, due to malnutrition, deficiency diseases are increasing in the world. Among these
diseases one of the most common and wide spread diseases is (Pandu) anaemia.

The disease in which pandu bhava is predominant is called as panduroga. The
disease in which the skin colour changes to pandu, haridra, harita varna and in all of these
colours pandutwa is predominant. Hence called as panduroga. The sign and symptoms of
pandu include pandutwa, daurbalya, bhrama, tandra, agrimandya, aarohan, aayas and
hritspandan.

The word “pandu” is described as white, yellowish white etc. Pandu means a
white colour mixed with yellowish thing according to Amarkosha. Vachaspatya refers pandu
as mixture of white and yellow colour which resembles with the pollen grains of ketki
flower. Pandu is such diseases in which there is vivarna/change in colour of the body.
Pandu/pallor of skin is 1st observed on the most superficial portion of body that is skin and
also observed in eyes, palate, tongue, nose, lips, palms, soles, nails, feces also in urine.
Panduroga is stated to be afflicted with raktalpata, medalpata, nissarata, vivarnata,
shithilandriya. In pandu all the dhatus become nissar. Due to this there is oja kshaya

The Samprati of panduroga is explained in detail by Aacharya Charaka as
follows- Due to sevena of hetu which is mention earlier there is increase in sadhaka pitta in
hridaya. This pitta is distributed all over the body through dasha dhamani by vyana vayu.
This pitta resides in between twaka and mamsa and vitiates kapha, vata, rakta, twacha and
mamsa and produces pandu, haridra and harita varna of the skin.

Samprapati Ghataka
Dosha: Pittapradhana Tridosha.
Dushya: Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Shukra
and Oja.
Strotasa: Rasavaha and Raktavaha mainly.
Udbhavasthana: Aamashaya, Hrida
Sanchara Sthana: Whole body through dasha dhamani.
Adhishthana: Twak and Mamsa.
Vyakti Sthana: Twak, Netra, Nakha.
Rogamarga: Bahya Rogamarga.

Charka has recomended dadimadi ghrita in animea heart disease,
splenomegaly, asthma, cough, diseases originated from vitiation of vata and kapha. It
increases digestive power, diseases of vata vitiation as well as it is recommended for
psotnatal care and infertility by chara.

Aims And Objectives:
To study the efficacy of dadimadi ghrita for trearing pandu (anaemia).

Methods And Materials:
Study design: Open labelled randomized controlled clinical trial.
Selection of patients: Subjects suffering from anaemia were selected, irrespective of caste, religion, socio economic strata.

Sampling: Simple random sampling technique using lottery method.

Sample size: 35

Study setting: The study was carried out at C.S.M.S.S AYURVED HOSPITAL Kanchanwadi Aurangabad. 1 February 2016-15 May 2016.

Ethical consideration: Informed written consent obtained from all subjects. The approval has been taken from institutional ethics committee.

Dadimadi Ghrita: Ingredients of this recipe has described as follows in classics of ayurveda

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Ingredient</th>
<th>Latin Name</th>
<th>Parts used</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dadima</td>
<td>Punica granatum</td>
<td>Fruits</td>
<td>Hridya [nice taste]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Raktavardhaka [Haematinic]</td>
</tr>
<tr>
<td>2</td>
<td>Dhanyaka</td>
<td>Coriandrum sativum</td>
<td>Seeds</td>
<td>Dipaka [Appetizer]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pachaka [Carminative]</td>
</tr>
<tr>
<td>3</td>
<td>Chitraka</td>
<td>Plumbago zeylanica</td>
<td>Roots</td>
<td>Aagnimandyahara [cures]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>weak digestion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dipana [Appetizer]</td>
</tr>
<tr>
<td>4</td>
<td>Shunthi</td>
<td>Zingiber Officinalis</td>
<td>Roots</td>
<td>Amapachaka [digest amam]</td>
</tr>
<tr>
<td>5</td>
<td>Pippali</td>
<td>Piper longum</td>
<td>Fruits</td>
<td>Raktavardhaka [Haematinic]</td>
</tr>
<tr>
<td>6</td>
<td>Ghrita</td>
<td>Cow ghee</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Method of preparation:

1] Roughly crush – Dhayaka, chitraka, shunthi, pippali- each 12.5 gms was soaked in little quantity of water for 8 hours.

2] Then 800 ml of water is added to above mixture and boiled on low flame till it remained 1/4th of total quantity, i.e. 200 ml - thus kvatha (decocation) of four ingredients has made as its not available fresh.

3] About 50 ml dadima fruit svarasa (juice) was prepared as it is available fresh.

4] Plain cow ghee about 250 grams taken in a pot, added with above decoction and juice and boiled on low flame (madhyampaka) till it remained 250 grams of medicated ghee only.

Inclusion criteria:

A] Subject suffering from following group of symptoms were included for study-

1] Nakha-netra-tvak – pandutva (Faintness in colour of nails, eyes and skin)

2] Pindikodveshantana (Pain in calf muscles)

3] Hritspa (Increases heart rate)

4] Akshikutashotha (Swelling around eyes)

5] Klama (Fatigue)

6] Arohanaayas (Exertional dyspnoea)

B] Subject having haemoglobin in between 6gm % to 11 gm%
Exclusion criteria:
A] The patient suffering from following condition were excluded from study-
1. Liver cirrhosis
2. Oedema
3. Worms
4. Bleeding haemorrhoids
5. Tuberculosis
patients with heart disease, diabetes mellitus and hypertension
Sample size: 35 complete cases
Safety: Monitoring of adverse events and clinical examination.

Intervention:
Drugs: Dadimadi ghrita
Dose: 10ml
Time: Morning empty stomach before 8.00 A.M.
Anupana; A cup of warm water
Duration: 30 days
Follow up: Follow up visit after 30 days

Assessment criteria:
A. Group of symptoms – Nakha-netra-tvak-pandutva (faintness in colour of nails, eyes and skin), pindikodveshatana (pain in calf muscles), hritspanda (increased heart rate) akshikutashotha (swelling around eyes) and klama (fatigue) Aarohanaayas-exertional dyspnoea MRC Scale were assessed before and after study treatment with following gradations –
1) panduta (pallor)
Grade0- no pallor
Grade1-palor in conjunctiva
Grade2-palor in conjunctiva &nails
Grade 3- pallor in whole body

2) Sharma (fatigue)
Grade 0- No fatigue.
Grade1- Not affecting his daily activities.
Grade2- Affecting his daily activities.
Grade3- Fatigue without any activity.

3) Akshikutashotha (Periorbital oedema)
Grade0-No periorbital oedema
Grade1- Only after rising from bed in morning.
Grade2- Persistent whole day.
Grade3- Disturbance while opening eyes.
4) Aarohanaayas (Exertional dyspnoea MRC scale)  
Grade 0 - No dyspnoea on level/uphill.  
Grade 1 - Dyspnoea on walking on level/uphill  
Grade 2 - Walk slower than persons of same age.  
Grade 3 - Stops after walking 100 yard.  

Severity index of anaemia – norm (all symptoms disappear) grade 0  
+- low grade (from 5 symptoms 3 disappear) grade 1  
++- moderate (2 symptoms disappear) grade 2  
++++- severe (all 5 present ) grade 3  

B) After giving treatment weekly record was kept.  

Observation:  
Out of subjects, maximum number of subjects was found in having nakha, netra, twak-pandutva (faintness in colour of nails, skin, eyes) followed by hritspanda (increased heart rate) and akshikutashotha (swelling around eyes), klama (fatigue) and pindikodveshtana (pain in calf muscles).  
They were 35(100%), 30(85.70%), 25(71.44%), 34(97.15%) respectively.  

Effect on increase in haemoglobin percentage  

<table>
<thead>
<tr>
<th>Difference in Hb%</th>
<th>No. of subjects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change</td>
<td>1</td>
<td>2.87</td>
</tr>
<tr>
<td>Up to 0.5gm%</td>
<td>5</td>
<td>14.28</td>
</tr>
<tr>
<td>Up to 1gm%</td>
<td>15</td>
<td>42.28</td>
</tr>
<tr>
<td>Up to 1.5gm%</td>
<td>10</td>
<td>28.57</td>
</tr>
<tr>
<td>Up to 2 gm %</td>
<td>3</td>
<td>8.57</td>
</tr>
<tr>
<td>&gt;2 gm %</td>
<td>1</td>
<td>2.86</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

Regarding this study, effect on increase in haemoglobin (up to 1gm%) was recorded in maximum number of subjects, i.e. 15. It was followed by group up to 1.5gm% in 5 subjects.  

Effect on haemoglobin percentage  

<table>
<thead>
<tr>
<th>Decrease or increase in Hb%</th>
<th>No. of subjects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease</td>
<td>2</td>
<td>5.81</td>
</tr>
<tr>
<td>Increase</td>
<td>32</td>
<td>91.43</td>
</tr>
<tr>
<td>No change</td>
<td>1</td>
<td>2.86</td>
</tr>
</tbody>
</table>

Out of total study population, maximum number of subjects (32) was found of increase in Hb %, i.e. 91.43%. Decrease in Hb % was also recorded in few subjects (02), i.e. 5.81% and no change was recorded in subject, i.e. 2.86%.
Total Effect Of Dadimadi Ghrita On Pandu

<table>
<thead>
<tr>
<th>% Relief</th>
<th>No. of subjects</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25%</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>26-50%</td>
<td>11</td>
<td>31.43</td>
</tr>
<tr>
<td>51-75%</td>
<td>16</td>
<td>45.71</td>
</tr>
<tr>
<td>76-100%</td>
<td>8</td>
<td>22.86</td>
</tr>
</tbody>
</table>

Total effect of treatment on pandu according to percentage of relief, out of 35 subjects, 16 subjects have up to 51-75% relief followed by 8 subjects up to 76-100% and then 11 subjects up to 26-50%.

Data analysis: statistical evaluation of the data obtained was done using means, standard deviation, percentage, mean difference. Data analysis was done by using SPSS 17.0 statistical software. We have used t test to find out significance before study treatment and after study treatment.

Discussion:
In Ayurveda Acharya charaka in his classical treaties, under the heading ‘pandu’ as mentioned a group of symptoms which very closely resembles with the signs and symptoms of Anemia. According to Ayurvedic texts pandu is defined as Rasapradoshaja vyadhi, which not only impairs and vitiates Rasa dhatu but also adversely affects all rest of the dhatus in a sequential manner upto shukra dhatu. The important symptoms mentioned by charaka are nihsar, shithilendriya, varna, Bala and oja kshaya, which directly affect physical and mental capabilities of an individual.

In modern medicine, there are adverse effect of medication i.e. nausea, vomiting, epigastric discomfort, and diarrhoea. Considering the above facts and lacuna the present study entitiled “Effect of Dadimadi ghrita on pandu.”

Pandu chikitsa-In Ayurveda, three general principles of treatment have been mentioned by Atreya in Charaka Samhita Sthana. They are Daivayapashraya, Yuktiyapashraya chikitsa which includes the following:

1) Nidan parivarjana
2) Snehan and Swedana
3) Shodhana
4) Shamana

The whole study was performed in only one group, obtaining the effect of therapies. All the clinical signs and symptoms were assessed on the basis of scoring given to them before and after treatment. The general observation pertaining to age, sex, occupation etc of 35 patients of pandu.

The critical analysis of result based on Ayurvedic fundamentals and scientific thoughts are presented under this title.
Conculsion:

- This study has revealed that Dadimadi grita has good effect on pandu. As well this drug has illustrated good effect on agni (digestive power) and nourishment of whole body.

References:

6. Database on Medicinal plants used in Ayurveda vol-1-CCRAS.