

A Clinical Study of Iron Deficiency Anemia during Pregnancy and its Homoeopathic Management

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Abstract: Iron Deficiency Anemia is one of the most common nutritional deficiency disorders, affecting the pregnant women in the developing countries. Prevalence of anemia during pregnancy was 49.5% in year 2019. There is more risk of death during pregnancy & leads to poor motor & mental growth in children. Among pregnant woman fall in anemia was explained by improvement in maternal schooling (24%), socio economic status (17%), & nutrition & health interventions (7%). Other factors included improved sanitation (9%), maternal age (3%), & meat & fish consumption (1%). The study cases were taken from the registered patients of Vrundavan hospital OPD & IPD from January 2019 to January 2020. Each case will be followed up to 9 months. It is single blind control trial, Prospective Quantitative study. **RESULT:** The use of well selected Homoeopathic Remedy has beneficial effect to improve Hb% as well as general health of the patient. **CONCLUSION:** We observed faster recovery in pregnant women with iron deficiency anemia. Here we observed the effectiveness of homoeopathic remedy like *Ars. Alb. Calc. carb.*, *china off.*, *Ferrum met.*, *Ferrum phos.*, *kail. carb.*, *lecithinum.*, *Nat. mur.*, *Nux vom.*, *Phos.*, *Pulsetc.* in 30 C potency, In the cases of iron deficiency anemia in pregnant woman.

Keywords: Iron deficiency anemia, homoeopathic remedy, pregnancy

1. Introduction

Anemia is generally defined according to hemoglobin levels, which may vary according to many factors most importantly age, gender, and ethnicity. Any level below 13 g/dL for males and below 12 g/dL for females is considered abnormal.

- 1) Hemoglobin levels of less than 11 g/dL at any time during pregnancy are considered abnormal. Once anemia is recognized, the possibility of iron deficiency should be considered.
- 2) Abnormalities in red blood cell indices on complete blood count typically precede the development of lowered hemoglobin levels.
- 3) Iron deficiency usually develops slowly over time, and may not be symptomatic, or clinically obvious.

Once iron stores are completely depleted, iron accessibility to the tissues decline leading to symptomatic anemia.

1.1 Causes of Iron Deficiency Anaemia during Pregnancy

- 1) Due to improper iron in the diet or iron losses due to excessive menstruation before pregnancy.
- 2) Because of high iron requirements during pregnancy result in iron deficiency anemia.
- 3) Other causes-
 - a) Failure to take oral iron tablets due to:-
 - Nausea & vomiting
 - Poor GI tolerance to oral iron
 - Negligence to take oral iron tablets.
 - b) Bleeding (vaginal, rectal) - piles, dysentery etc.
 - c) Mal-absorption & helminthic infection.
 - d) Poor dietary habits.
 - e) Deficiency of vitamins such as Vitamin B12, C, folic acid.

- f) Deficiency of gastric intrinsic factor, deficient intestinal absorption.
- g) Loss of appetite & diarrhea.

1.2 Symptoms & Signs of Iron Deficiency Anemia

a) Symptoms:

- Fatigue and diminished capability to perform hard labour.
- Leg cramps on climbing stairs.
- PICA especially for ice to suck or to chew.
- Decreased immunity.
- Irritability, headache, palpitations, dizziness, breathlessness.

b) Signs:

- Pallor of the mucous membranes
- Koilonychia i.e. spoon shaped nails.
- Glossy tongue with atrophy of lingual papillae, angular stomatitis.
- Splenomegaly.

1.3 Risks of iron Deficiency anemia In Pregnancy

Severe or untreated iron-deficiency anemia during pregnancy can increase risk of having:

- A preterm or low-birth-weight baby
- A blood transfusion (if lose a significant amount of blood during delivery)

1) Diagnosis-

- a) Iron deficiency anemia during pregnancy is diagnosed if the Hb% is less than 10 gm% or the hematocrit reading is less than 30%
- b) Iron deficiency anemia is generally diagnosed by:-
 - The appearance of microcytic hypochromic erythrocytes in a peripheral blood smear.

- Low serum iron (less than 60 micro grams) accompanied by high total iron binding capacity (over 300 micrograms %) or transfer in saturation of only 15%, Decrease in M.C.H.C value.

2) Investigations-

- Antenatal examination of all the system thoroughly.
- The Hb should be first estimated on 1st antenatal visit & then at the 28th week & 36th week.
- When no improvement during second follow up, in such cases we have done following investigations:
 - Hematological investigation including bone marrow test
 - Estimation of plasma iron binding capacity should be investigated.

1.4 Treatment for Iron Deficiency anemia

Diet and homoeopathic management

Diet: A balanced and nutritious diet can go a long way in reversing anemia. Jiggery, dates, resins, egg yolks, clams & liver, Spinach and other dark leafy vegetables, Dried beans, Parsley (herb) is one of the richest sources of iron among plants Nuts, seeds Dried fruits (apricots, peaches, raisins, and prunes) Fortified cereals, Fortified soy products Brewer's yeast, Cooking in iron pots and pans can also increase the amounts of iron consumed. Vitamin C can enhance iron absorption in the body. So, a diet rich in vitamin C consisting of fresh fruits and vegetables (Alma, guavas, limes, oranges, tomatoes, cabbages, etc.) should be maintained as well.

Homoeopathic Management:

Homoeopathic treatment requires a thorough investigation of the patient's physical as well as mental makeup. This makes the only guide for the selection of Homoeopathic similimum. Homoeopathic medicines are selected on the basis of constitutional similarity which includes the study of person's physical state, mental state, familial tendencies and state of his present complaints. Few most commonly used homoeopathic medicines for Iron Deficiency Anemia are: Ars. AlbCalc.carb, china off, Ferrum met, Ferrum phos,kail..carb, lecithinum, Nat..mur. Nux vom.,Phos, Puls etc.

ARSENIC ALBUM: – anemia with great prostration, weakness and restlessness, during pregnancy. Its indications are excessive prostration considerable edema, violent and irregular palpitation, marked appetite for acids, extreme anxiety and rapid emaciation. There is irritable stomach and intense thirst. When the allopathic school uses Arsenic as a blood tonic, and Dr.Bartholow says, "it is one of the most valuable remedies in the treatment of chlorosis and anemia," it does so on strictly Homoeopathic principles.

CALCAREA CARB:- It is the natural Homeopathic medicines for anemia that work well to control pica. Constipation is marked along with pica. Calcarea Carb is the Homeopathic medicine recommended when there is a desire for lime, chalk and pencils. Craving for boiled eggs and increased sweat on head are important symptoms. – Almost any of the deeper acting constitutional remedies may

be of use in anemic and debilitated conditions. Calcareacarbonica is indicated by the psoric, scrofulous or tubercular diathesis and the general symptoms of the drug, by disgust for meat, craving for sour and indigestible things, swelling of abdomen, vertigo and palpitation; on -going upstairs. The patient is in a state of worry.

CHINA OFFICINALIS: This remedy has debility from exhausting discharges and loss of vital fluids. The individuals will have sallow complexion of face especially after hemorrhage, loss of vital fluids or sexual excesses. There will be heaviness of head with loss of sight, aversion to exercise, sensitive to touch, ringing sensation in ears, intolerance to fruits.

FERRUM METALLICUM: This remedy is best suited for young weakly persons, who are anemic with pseudo-plethora, who flush easily, have cold extremities, oversensitive to slight noises and whose complaints become worse after any active effort. There is weakness from mere speaking or walking. Red parts become white, bloodless and puffy. There will be breathing difficulty due to surging of blood to chest and anemic murmur can be heard.

FERRUM PHOS – due to lack of iron; it promotes synthesis of hemoglobin. Iron is the great allopathic remedy for anemia from almost any cause. It is also a great homeopathic remedy, but it will not cure every case of anemia; careful individualization is necessary. When the patient has an appearance of full bloodedness or plethora, which is followed by paleness or earthiness of the face and puffiness of the extremities, then Ferrum will benefit. It is not the remedy for the anemia resulting from loss of fluids; that is Cinchona, or perhaps Natrum muriaticum. When Ferrum is indicated the mucous membranes are pale, more so than with Cinchona, and there is apt to be an anemia murmur in the veins of the neck. The patient is easily exhausted. Vomiting of food after eating may occur. The patient is constantly chilly and perhaps has an afternoon or evening fever simulating hectic fever.

KALI CARB – It is one of the most important remedies in anemia, weak heart, profuse sweating backache, especially with female complaints. Lack of RBC's in blood, weakness along with menstrual disturbances at the time of puberty, milky white skin with great debility, bloated face, with swelling above eyelids.

LECITHINUM – This remedy has action on blood and is usually given for anemic individuals to increase the number of RBCs and amount of Hb. There will be mental exhaustion. The individual will be weak with shortness of breath, loss of flesh; will be forgetful, dull and confused. The headache in the occiput will be pulsating type and will crave for wine and coffee.

NATRUM MURIATICUM – This is one of our best remedies in anemic conditions. There is paleness, and, in spite of the fact that the patient eats well, there is emaciation. There are attacks of throbbing headache and dyspnea, especially on going up stairs, constipation and depression of spirits, and consolation aggravates. With these symptoms there is much palpitation, fluttering and

intermittent action of the heart. The hypochondriasis in these cases is marked. Scanty menstruation is frequently an indicating symptom.

NUX VOMICA: – anemia caused due to indigestion, especially in those people who have sedentary life habits or given to high living standards. The main symptom for using Homeopathic medicine Nux Vomica is also constipation and sensitivity to cold air. The constipation symptom is scanty stool with frequent ineffectual desire to pass stool. Acidity and heaviness in abdomen after eating is also marked.

PHOSPHORUS: - This remedy is adapted to tall, slender persons, narrow chested, thin with transparent skin, weakened by loss of animal fluids. There will be great debility with emaciation. There will be hemorrhagic tendency. Chronic congestion of head, thirst for cold water. Violent palpitation with anxiety while lying on left side and weakness and trembling from every exertion

PULSATILLA: –It is well known medicine for iron deficiency anemia. Patient is mild, thirstless, aggravated by heat. Pulsatilla is the great antidote to Iron, and hence is indicated in the anemic condition produced by large or continued doses of it. The system is relaxed and worn out; the patient is chilly and suffers from gastric and menstrual derangements. Thus the symptoms resemble closely those calling for Ferrum. The cause of the anemia must be sought for, and if the case comes from allopathic hands it is safe to infer that much Iron has been given and Pulsatilla will surely be the remedy. The Pulsatilla patient feels better in the open air. Dizziness on rising, absence of thirst, and the peculiar disposition will lead to the remedy.

2. Materials & Methods

Study Set Up:-

The study was conducted at MHF’S HMC SANGAMNER. The study cases were taken from the registered patients from Vrundavan hospital OPD & IPD from January 2019 to January 2020.

Subjects

- All cases of ANC, registered in homoeopathic OPD &IPD OF Vrundavan hospital
- We found 30 cases from all resisted cases having Hb% within 10 to 5 gm%

Inclusion Criteria

- All pregnant women having Hb% below 10gm%
- All pregnant women having Haematocrit value < 30%

Exclusion Criteria

- High risk pregnancy
- Hb% below 5gm %

Study Parameter

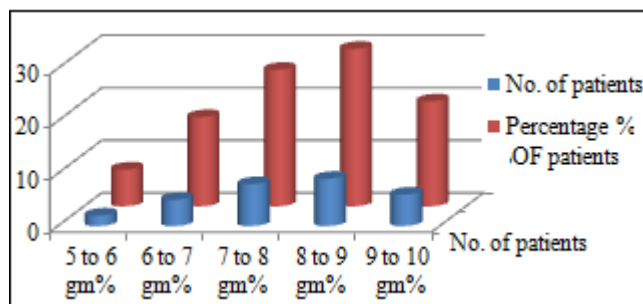
- Hb%
- MCHC
- MCV

- IRON BINDING CAPACITY IF no improvement after 2 follow ups

Analysis:

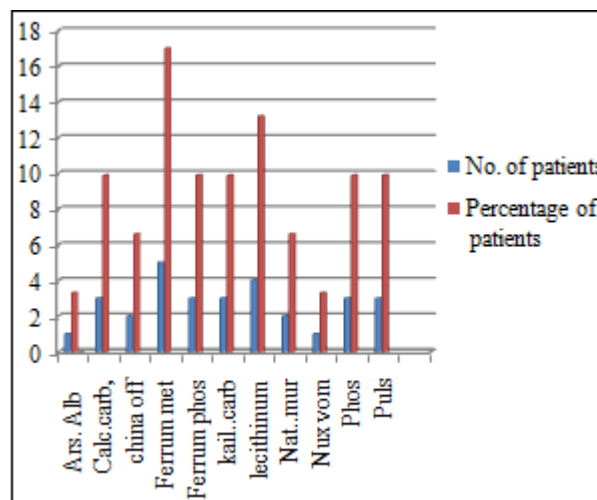
HB% Statistical Analysis

Hb%	No. of patients	Percentage %
5 to 6	2	7
6to7	5	17
7to8	8	26
8to9	9	30
9to10	6	20
TOTAL	30	100



Remedy Analysis

Prescribed remedy	No. of patients	Percentage of patients
Ars. Alb	1	3.3
Calc.carb,	3	9.9
china off	2	6.6
Ferrum met	5	17
Ferrum phos	3	9.9
kail..carb	3	9.9
lecithinum	4	13.2
Nat..mur	2	6.6
Nux vom	1	3.3
Phos	3	9.9
Puls	3	9.9
TOTAL	30	100



3. Outcome of Study

The study found that; well selected Homoeopathic Remedy (by considering susceptibility, disposition, miasms, physical and mental make-up) had improved Hb% & general health of a patient. We observed faster recovery in pregnant

women with iron deficiency anemia. Here we have observed the effectiveness of Homoeopathic remedy in cases of iron deficiency anemia in pregnant women.

4. Conclusion

- Iron Deficiency Anemia is one of the most common nutritional deficiency disorders, affecting the pregnant women in the developing countries.
- After 9 month of treatment with homoeopathic remedies we observed specific improvement in clinical features of Iron Deficiency anemia with P value<0.001.
- After giving homoeopathic remedy like Acid. Phos, Ars. Alb., Calc.carb, Ferrum met, Ferrum phos,kail.carb, lecithinum, Nat..mur., nuxvom., Phos, Puls, etc. in 30 C potency, In the cases of iron deficiency anemia in pregnant woman.
- We observe significant improvement in clinical features such as pallor, anorexia, weakness, fatigue, irritability & so on. Also improves the Hemoglobin status & body metabolism & finally relief in clinical symptoms are observed
- In control group improvement in Hb value was not satisfactory.
- No adverse effects were recorded when homoeopathic remedies were given. It is concluded from the percentage of symptomatic relief (50% to 90%) that homoeopathic remedies are very much useful in treating the Iron Deficiency Anemia.

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6. Conflict of Interest

The author's declared that they have no any conflict of interest

References

- [1] Downs SH, Black N. The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of Epidemiology & Community Health*. 1998 Jun1;52(6):377-84.
- [2] Shevanta S. Jadhav et.al. Iron Deficiency Anaemia & Ferrumphosphoricum: A Systematic Review *International Journal of Research & Review* (www.ijrrjournal.com)91Vol.6;Issue: 2; February 2019anaemia in adult age group [Postgraduate]. Father Muller Homoeopathic Medical College, Mangalore; 2012.
- [3] Phatak SR. *Concise Repertory of Homoeopathic Medicines*. B. Jain Publishers; 2004
- [4] Clarke JH. *Clinical Repertory*. B. Jain Publishers; 1994.
- [5] Boger CM, von Boenninghausen C. *Boenninghausen's Characteristics and Repertory*. B. Jain Publishers Pvt. Limited; 1988.

- [6] Allen TF, von von Boenninghausen CM. *Boenninghausen's Therapeutic Pocket Book*. B. Jain Publishers; 1994.
- [7] Van Roger Z. *The Complete Repertory*, 1998 Reprint edition. Institute for Research on Homoeopathic Information and Symptomatology.
- [8] Boericke W. *Boericke's New Manual of Homoeopathic Materia Medica with Repertory*. 3 rd Revised and Augmented Edition Based on 9th ed. New Delhi: B
- [9] Katz T. *Synthesis-Repertorium Homoeopathicum Syntheticum*. Edited by FrederikSchroyens. London: Homoeopathic Book Publishers. ISBN 0982274493. 1129
- [10] *Therapeutical Application, Materia Medica, and Repertory of Schuessler's Twelve Tissue Remedies*. William B. Pocket Manual of Homoeopathic Materia Medica. In: 1981. B. Jain Publishers
- [11] Allen TF. *The Encyclopedia of pure materiamedica*. Boericke & Tafel; 1878.
- [12] Vermeulen F. *Concordant Materia Medica: Boericke, Phatak, Boger, Lippe, Allen, Pulford, Cowperthwaite, Kent, Clarke, Vermeulen*. Merlijn Publ.; 1994.
- [13] Clarke JH. *A dictionary of practicalmateria medica*. homoeopathic publishing Company; 1902.
- [14] Kent JT. *Lectures on homoeopathic material medica*. Jain Publishing Company; 1980