

A comparative study between the efficacy of individualized homeopathic medicine along with Ferrum phosphoricum 6X as biochemic and Lecithin 12C alone in treatment of anemia in females of 13 to 49 years of age group

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Abstract

Background: Anaemia in females of reproductive age are at high risk. **Objective:** The objective of this study is compare the effectiveness of Individualized Homoeopathic medicine along with Ferrum phos 6X and Lecithin 12C alone in treatment of anemia and secondary objective is to find out common causes of anemia. **Materials and Methods:** Comparative study was done for 6months and sample were taken from Motiwala Hospital OPD and Medical camps through Simple random Sampling technique 46 sample size were selected according to our inclusion criteria (females of 13 to 49 years of age, Hb ranging from 7 to 12gm/dl, patient who have given consent and who have fulfilled the criteria for questionnaire) and complete blood count was done. The sample were divided into two, Group A were given Individualized homoeopathic medicine along with Ferrum phos 6X and Ferrum phos 6X was repeated in every follow up. Group B was given Lecithin 12C and it was repeated in alternate follow up. After 6 follow ups again complete blood count was done and result were formed accordingly. **Results:** 135 patients were screened and out of which 46 sample size was selected, the calculated t value 2.20 significantly exceeds the table t value 2.02. Hence it was considered that the study is statistically significant. Among 46 cases of anemia, the most common cause was nutritional deficiency due to improper dietary intake (36 cases, 78.26%) followed by recurrent infection (5 cases, 10.87%), heavy menstrual bleeding (4 cases, 8.70%) and hemorrhoids (1 case, 2.17%).. **Conclusion:** Hence we concluded that both individualized homeopathic medicine with Ferrum phos 6X and Lecithin 12C are effective in treating anemia, but their impact is unequal. The combination of homeopathic medicine with Ferrum phos 6X showed significantly better improvement in anemia compared to Lecithin 12C.

Keywords: Anemia, Lecithin 12C, Ferrum Phos 6X, Menstruating females, Hemoglobin, Homoeopathic medicine.

INTRODUCTION

Anemia is a disorder of blood characterised by decrease in red blood cell count and haemoglobin content and packed cell volume leading to reduced oxygen supply to the tissues.⁽¹⁾ According to WHO, Anemia is a

condition in which the number of red blood cells or the haemoglobin concentration is lower than normal. According to WHO It is defined as haemoglobin level less than 12 gram/dl in women and less than 13 gram/dl in men. ⁽²⁾. The common causes of anemia are iron deficiency, folate, vitamins B12 and A deficiency. ⁽³⁾There are different kinds of anemia the common type is nutritional anemia. Physiological classification of anemia by CBC is as follows. Normocytic & normochromic type of RBC seen in bone marrow disorder, iron deficiency. Microcytic or macrocytic type of RBC seen in maturation disorder, such as folate deficiency, vitamin b12 deficiency etc.⁽⁴⁾ Homeopathic medicines works on assimilation of nutrients. It has a great impact on anemia. The most commonly indicated medicines are Ferrum Phosphoricum, Ferrum Metallicum, arsenic album, Pulsatilla Nigricans, Natrum muriaticum, etc.⁽⁵⁾

Globally, it is estimated that 40% of children aged 6–59 months, 37% of pregnant females and 30% of females 15–49 years of age are affected by anemia: ⁽⁶⁾ A cross sectional research study had done, it reflects that the prevalence rate of iron deficiency anemia is more in the females of age 12 to 21 years, menstruation is high risk factor for it. ⁽⁷⁾ The prevalence of anemia is 57.0 percent in women (15-49 years) as per the NFHS 5 (2019-21)⁽⁸⁾ Prevalence in Nashik is 56.2% in the year of 2019-20. Out of 36 districts, 12 districts are 50% and a higher prevalence of anemia. ⁽⁹⁾

Lecithin increases red blood cells and with increase in amount of hemoglobin, it is favorable in nutritive condition and should be used in 12C potency. Ferrum phos 3X increases hemoglobin⁽¹⁰⁾ It is present in the form hemoglobin in red blood cells, it produces rapid oxidation with rise of temperature⁽¹¹⁾. Homoeopathic medicines helps in assimilation of nutrients⁽¹²⁾, it acts upon the dynamic level and corrects assimilation⁽¹³⁾. Other Homoeopathic therapeutics are Ferrum Metallicum, Cinchona, Arsenic album, Natrum muriaticum and many more⁽¹⁴⁾

There are 3 grades of anemia, Grade 1(mild) >10gm/dl, Grade 2 (moderate) 8 to 10gm/dl, Grade 3(severe) 6.5 to 8 gm/dl⁽¹⁵⁾. Previous studies have shown that Ferrum phos 3X was more effective than Lecithin 3X in treating anemia.⁽¹⁶⁾ To further explore the efficacy of Lecithin, this study was conducted. According to Boericke's Materia Medica, Dr. William Boericke recommended the use of Lecithin in the twelfth potency, which was applied in this study. ⁽¹⁰⁾ Additionally, prior to beginning our research, we investigated the use of Ferrum phos and found that combining homeopathic medicine with Ferrum phos proved more effective than using Ferrum phos alone in treating anemia.⁽¹⁷⁾ To address this, we aimed to compare the effectiveness of individualized homeopathic medicine with Ferrum Phos 6X versus Lecithin 12C alone in treating anemia.

Materials and methods**Study setting**

The study was conducted using samples collected from outpatient department (OPD) of Motiwala Hospital and from Medical camps organized at Matoshri Radhabai Shantarambapu Wavre Highschool, in Nashik. Participants were initially screened using a structured questionnaire designed to assess relevant clinical criteria. Individuals who scored between 6 to 14 on questionnaire were considered eligible for inclusion in the study.

Identification of patients with low hemoglobin

A voluntary written consent was taken, and a complete blood count (CBC) was performed for all selected participants. Individuals with hemoglobin levels ranging from 7 to 12 g/dL were included in the study. A detailed and systematic case history was taken for each participant to identify the common underlying causes of anemia.

Study duration

The study duration was for 6 months

Inclusion and Exclusion criteria

Females of 13 to 49 years of age, hemoglobin ranging between 7 to 12 gm/dl, patient who have given consent and who have fulfilled the criteria for questionnaire⁽¹⁸⁾ were enrolled in the study. And the criteria for exclusion were Males, hemoglobin <7gm/dl or >12gm/dl, Pregnant and lactating females, premenarche and post menopausal females, malignant cases.

Sample size

Total 135 patients were screened among that, 50 cases were enrolled out of which 4 cases were dropout. After which our sample size were 46 according to inclusion and exclusion criteria

Comparative study

The patients enrolled were divided into two groups i.e. those having anemia (hemoglobin 7 to 12gm/dl) according to simple random sampling technique, were the patients were divided randomly in both groups, Group A were given Individualized homoeopathic medicine along with Ferrum phos 6X, and Group B was given Lecithin 12C. By a complete case taking (including past and family history, personal history, mental generals, miasmatic diagnosis, general and systemic examination and diagnosis of the patient)

Follow ups and assessments

Institutions qualified homeopathic practitioners conducted assessments and follow ups of each enrolled patients, 6 follow ups were taken in the gap of 15 days for a period of 3 months. For follow ups conducted in schools, presence of school teacher was mandatory. Group A (Individualized homoeopathic medicine along with Ferrum phos 6X) was given Ferrum phos 6X in every follow up. And Group B (Lecithin 12C) was given Lecithin 12C in alternate follow ups. Complete blood count was conducted after 6 follow ups, changes in Hb levels were noted. Common causes of anemia were recorded. Mean values of before and after the treatment were compared by unpaired t test.

Results

The study was conducted in M(N)HMC OPD & Matoshri Radhabai Shantarambapu Wavre Highschool, in Nashik. 135 patients were screened out of that 50 patients enrolled in the study, 4 cases were dropped out due to irregular follow ups. Unpaired t test⁽¹⁹⁾ was applied and the result was, calculated t value 2.20 significantly exceeds the table t value 2.02. Hence it was considered that the study is statistically significant (Figure 01) Mean hemoglobin value increased from 10.65 to 11.87 after treatment with Individualized homoeopathic medicine along with Ferrum phos 6X. Mean hemoglobin value increased from 10.18 to 10.96 after treatment with Lecithin 12C (figure 01). Table 01 represents the data of improvement in hemoglobin value. It shows that 47.83% cases improved, 47.83% cases were improving and 4.34% showed no improvement in Individualized homoeopathic medicine along with Ferrum phos 6X. And that 26.1% cases improved, 60.87% cases were improving and 13.03% showed no improvement in Lecithin 12C group. Among 46 cases of anemia, the most common cause was nutritional deficiency due to improper dietary intake (36 cases, 78.26%) followed by recurrent infection (5 cases, 10.87%), heavy menstrual bleeding (4 cases, 8.70%) and hemorrhoids (1 case, 2.17%).(Table 01)

Discussion

To our knowledge, this is our first study to identify efficacy of individualized homeopathic medicine along with Ferrum phosphoricum 6X as biochemic and Lecithin 12C alone in treatment of anemia in females of 13 to 49 years of age group. Anemia is a condition in which presence of insufficient RBC to adequately deliver oxygen to the peripheral tissues. Women of reproductive age and pregnant women are at a high risk of anemia, which in turn may contribute to maternal morbidity and mortality, making it essential to find effective

treatments to increase hemoglobin levels and reduce suffering.

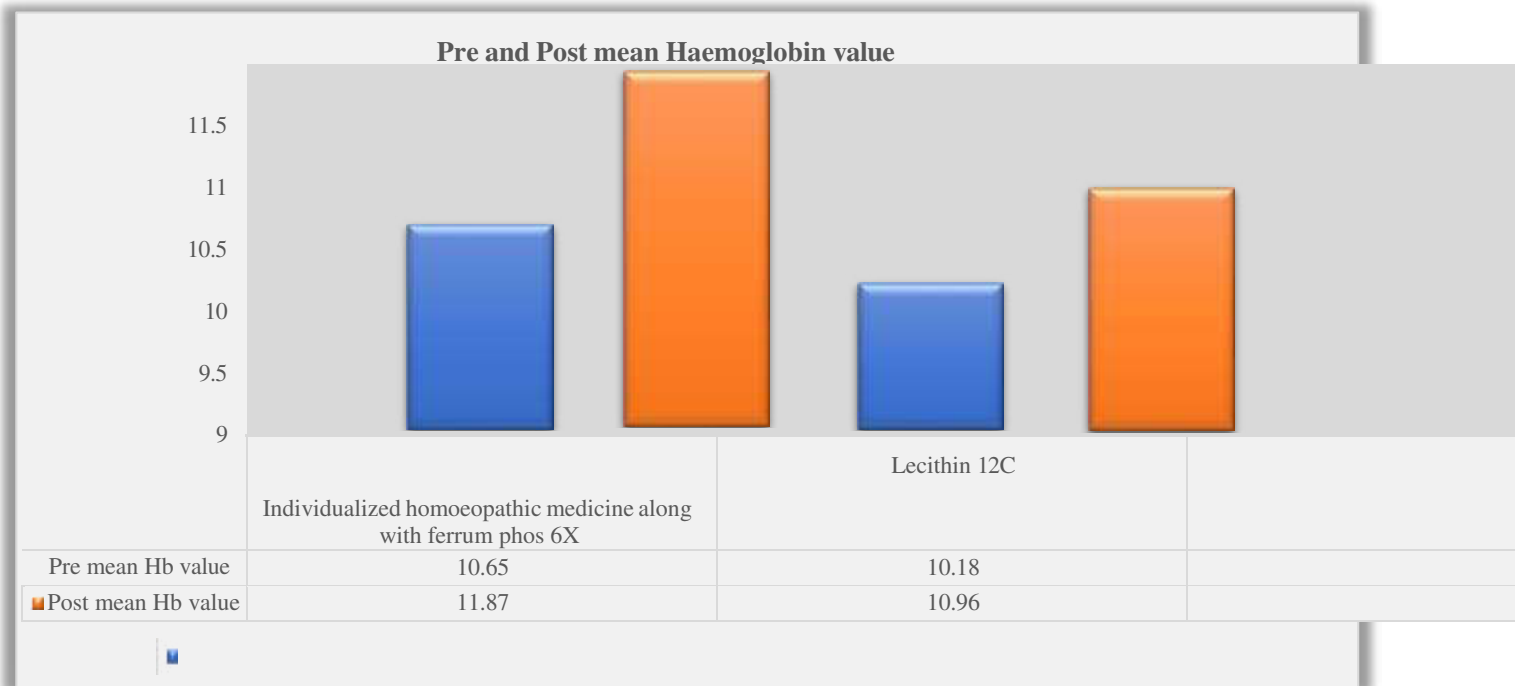


Figure 01: Graphical presentation of Pre and Post Mean

Haemoglobin value Table 01: Improvement in hemoglobin value

GROUP	IMPROVED	IMPROVING	NOT IMPROVED
Individualized homoeopathic medicine along with Ferrum phos 6X	11 (47.83%)	11 (47.83%)	1 (4.34%)
Lecithin 12C	6 (26.01%)	14 (60.87%)	3 (13.03%)

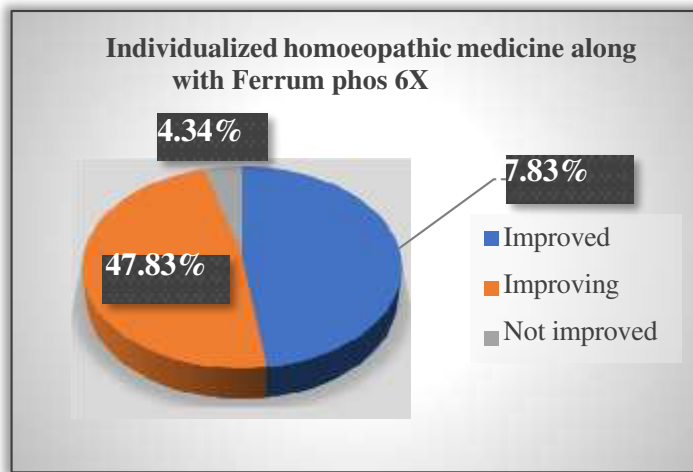


Figure 02: Result of Individualized homoeopathic group medicine along with Ferrum phos 6X

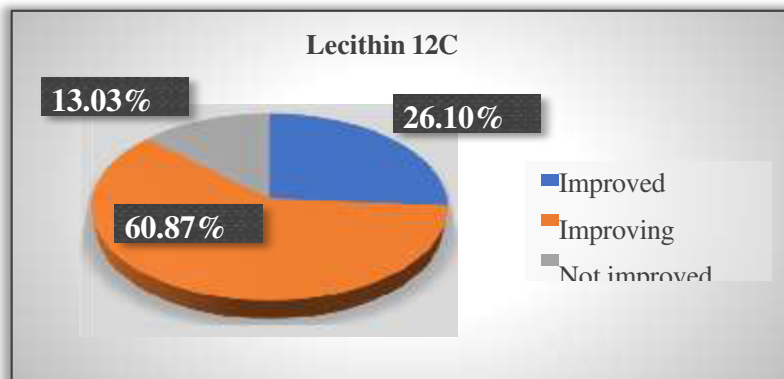


Figure 03: Result of Lecithin 12C

Table 02 : Common causes of anemia

Sr. no	Causes of anemia	No. of cases
1.	Nutritional deficiency due to Improper dietary intake	36 (78.26%)
2.	Recurrent infection	5 (10.87%)
3.	Heavy menstrual bleeding	4 (8.70%)
4.	Haemorrhoids	1 (2.17%)

Previous studies have shown that Ferrum phos 3X was more effective than Lecithin 3X in treating anemia.⁽¹⁶⁾ To further explore the efficacy of Lecithin, this study was conducted. According to Boericke's Materia Medica, Dr. William Boericke recommended the use of Lecithin in the twelfth potency, which was applied in this study.⁽¹⁰⁾ Additionally, prior to beginning our research, we investigated the use of Ferrum phos and found that combining homeopathic medicine with Ferrum phos proved more effective than using Ferrum phos alone in treating anemia.⁽¹⁷⁾

To address this, we aimed to compare the effectiveness of individualized homeopathic medicine with Ferrum Phos 6X versus Lecithin 12C alone in treating anemia. This study helps to evaluate which approach offers better improvement in hemoglobin value and overall patient well-being.

A total of 135 patients were screened, and 50 were enrolled in the study, conducted at Motiwala (National) Homoeopathic Medical College and through medical camps in schools. Four cases were dropped, leaving 46 patients. Of these, 23 received individualized homeopathic medicine with Ferrum Phos 6X for three months, while the other 23 received Lecithin 12C in alternate follow-ups for the same duration. Complete Blood Count reports were taken at the first consultation and after six follow-ups. Both groups showed significant improvement in physical health and weight gain. (Table 01) In the study, 47.83% of patients in the Individualized homeopathic medicine with Ferrum phos 6X group showed improvement, 47.83% were improving, and 4.34% showed no improvement. In the Lecithin 12C group, 26.01% showed improvement 60.87% were improving, and 13.03% showed no improvement

This suggests that Ferrum Phos 6X, in combination with individualized homeopathic treatment, is more effective in treating anemia. The data on the causes of anemia (table 02) reveals that the majority of cases, **78.26%**, are attributed to nutritional deficiencies due to improper dietary intake, emphasizing the crucial role of nutrition in maintaining healthy hemoglobin levels. Recurrent infections account for **10.87%** of cases, likely due to increased iron demand and inflammation affecting red blood cell production., while heavy menstrual bleeding contributes to **8.70%**, highlighting the need for menstrual health management in anemia prevention. A smaller proportion, **2.17%**, is linked to hemorrhoids. indicates that even chronic minor blood loss can lead to anemia over time. Addressing these factors through dietary improvements, control in recurrent infection, and managing blood loss sources is essential for effective anemia prevention and treatment.

For statistical analysis, Unpaired t- test was used, as the calculated t value (**2.20**) statistically exceeds the table t value (**2.02**), where the test was found statistically significant. Null hypothesis was rejected, hence it indicates that there is significant difference between two groups and Individualized homoeopathic medicine along with Ferrum phos 6X are more effective than lecithin 12C alone in treatment of anemia.

There was a gap in the research framework as the research objective was not adequately reflected in the Case Report Format. The objective was to find out cause. This misalignment between the CRF and the study objectives could potentially impact the consistency and relevance of data collection and outcomes of the study. Another limitation was short duration of study.

To **improve** the management of anemia, **future research** could focus on strategies to enhance patient compliance, such as community awareness programs. Comparative studies on different treatment approaches, nutritional interventions, and lifestyle modifications could also be conducted. Also, explore the potency of lecithin and its repetition. Additionally, a long-term follow-up study could assess the sustained impact of homeopathic treatment in treating anemia effectively.

Conclusion

The study of 46 cases concluded that both individualized homeopathic medicine with Ferrum phos 6X and Lecithin 12C are effective in treating anemia, but their impact is unequal. The combination of homeopathic medicine with Ferrum phos 6X showed significantly better improvement in anemia compared to Lecithin 12C.

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Conflict of interest

None declared.

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