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# "EFFICACY OF HOMOEOPATHIC MEDICINES IN CASES OF CELIAC DISEASE IN ADOLECENTS WITH THE AID OF HOMOEOPATHIC MEDICAL REPERTORY BY ROBIN MURPHY- AN OPEN LABEL CLNICAL TRIAL."

**[1]*Dr. Yasir Mirza, [2]Dr. Aijaz Aziz Sulemani, [3]Dr. Neetu Singh, [4]Dr. Sudhir Sharma, [5]Dr. Anil Aggarwal and [6]Dr. Rubina Khanam**

[1]MD (HOM.)

[2]Principal & HOD Dept. of Repertory, MNHMC & R.I., Bikaner.

[3]Prof. & HOD. Department of Obst & Gynae, MNHMC & R.I., Bikaner.

[4]Principal & HOD. Department of Organon of Medicine, SVNMC, Amreli, Gujrat.

[5]Associate Professor, Department of PM, SGNHMC, Shriganganagr.

[6]PGR Department of Repertory, MNHMC & R.I., Bikaner.

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***Corresponding Author**
**Dr. Yasir Mirza**
MD (HOM.)

## ABSTRACT

**Background** - Celiac disease (CD), also known as gluten-sensitive enteropathy or celiac sprue, is defined as a permanent intolerance to ingested gluten (the storage protein components of wheat, barley and rye. The intolerance to gluten results in immune-mediated damage to the mucosa of the small intestine characteristically inducing villous atrophy and crypt hyperplasia that resolve with the removal of gluten from the diet. Homeopathy can treat celiac disease and individual susceptibility. The right constitutional similimum arrived by the help of mental generals, physical generals, characteristic particulars, causation, modalities and concomitants helps in removing the underlining susceptibility and bring out the cure. It can also managed by diet regimen and life style modification along with homoeopathic treatment.

**Objectives** - To assess the extent of improvement in cases of celiac disease with Homoeopathic medicines by The Gastrointestinal symptom rating scale (GSRS) and lowering the tTG levels.

Study Design - An open label clinical trial

**Methods & Methodology** - A total of 60 patients were enrolled in the study meeting the inclusion and exclusion criteria after screening from the hospital OPD. The data of 60

participants, were analyzed after 6 follow ups. In this study, the management of celiac disease began with the assessment of tTG level and severity of symptoms with the help of The Gastrointestinal symptom rating scale (GSRS) and with the aid of Homoeopathic Medical Repertory by Robin Murphy. They were then given homoeopathic intervention through holistic approach and reassessed for symptoms severity. **Results** - Observations and Results shows that among 60 cases of Celiac Disease enrolled in the study, the age group of 10-21 years was enrolled both males and females. In the study more cases were from urban area residence. Commonly middle class socio-economic status people 68.33%, upper class 18.33% and Lower class 13.33% were affected. 60 Cases of Celiac Disease were treated with individualized Homeopathic medicine on the basis of totality of symptoms as add on treatment. The most frequently prescribed Homoeopathic medicines were *Ars. Alb. (n=12), Sulph. (n=9), China (n=8), Ipec.(n=6), Phosphorus (n=6), Lyco (n=5), Puls. (n=4), Podo. (N=3), Acid Nit. (n= 2), Colo. (n=2), bryo.(n=1), Carc. (n=1), Nat.Mur. (n=1), Cal Carb (n=1), Cactus G (n=1), Carbo.V. (n=1), Iris (n=1), Kali.C. (n=1), Nux.V.(n=1), R.T. (n=1), Bell (n=1), Nat.Carb.(n=1), Butyric Acid (n=1).* Among 60 cases of Celiac Disease cases were improved and 06 cases were not improved on the basis of biochemical parameters like The Gastrointestinal symptom rating scale (GSRS) and lowering the tTG levels.

**Conclusion** – • Homoeopathic medicines selected on the basis of individualization with aid of Homoeopathic Medical Repertory by Robin Murphy reduce the GSRS as well as tTG levels, which is important in Celiac disease patients for preventing future complications of Celiac Disease. • The most commonly used medicines were *Ars. Alb., Sulph., China., Ipec., Phosphorus, Lyco., Puls., Podo., Acid Nit., Colo., Bryo., Carc., Nat.Mur., Cal Carb, Cactus G, Carbo.V., Iris, Kali.C., Nux.V., R.T., Bell, Nat.Carb., Butyric Acid.*

The present study was a tiny initiative effort in the direction of evidence based studies dealing with Celiac disease through Holistic approach in Homoeopathy and helpful in establishing the significant role of Homoeopathic remedies in managing cases of Celiac disease through Holistic approach with Homoeopathic Medical Repertory by Robin Murphy.

**KEYWORDS:** Celiac Disease, Adolescents, Homoeopathic Medical Repertory by Robin Murphy, The Gastrointestinal symptom rating scale (GSRS), The tTG levels, Individualized medicine.

## INTRODUCTION

Celiac disease is a chronic immune mediated disorder that develops in genetically susceptible

persons when gluten, a major protein found in wheat, barley, and rye is ingested in the diet. It is also known as non-tropical sprue, or gluten-sensitive enteropathy. There is inflammation of the small bowel mucosa and atrophy of the villi, resulting in nutrient malabsorption (protein, fat, carbohydrates, vitamins and minerals), wasting and diarrhoea. Any system may be involved and extra intestinal manifestations can appear, it include anaemia, bone disease lymphoma, and liver disease. Dermatitis herpetiformis is a related skin condition experienced by some celiac disease patients.

**Epidemiology**

Over the past two decades, CD has emerged as a major public health problem. Initial prevalence studies in the general population came from European countries and it was estimated to affect approximately 1% of the European population. The global seroprevalence and prevalence of CD are 1.4% and 0.7%, respectively, with the highest prevalence in Europe (0.8%) and Oceania (0.8%), and the least prevalence in South America (0.4%). The prevalence values for celiac disease were 0.5% in Africa and North America, 0.6% in Asia.

The prevalence of CD varies with sex and age, It is 1.5 times more common in females than in males, and approximately twice more common in children than in adults. The prevalence of CD has increased over time from 0.6% in 1991 to 2000 to 0.8% between 2001 and 2016.

The prevalence of celiac disease in this north Indian community is 1 in 96. Celiac disease is more common than is recognized in India. The overall seroprevalence of celiac disease was 1.44% and the overall prevalence of celiac disease was 1.04% in north India. Age-adjusted prevalence of celiac autoantibodies was 1.23% in northern, 0.87% in north-eastern, and 0.10% in southern India.

The overall prevalence of CD in Bikaner Northwest India is 1.04% (1 in 96), but majority of Celiac patients are still undiagnosed mainly due to the lack of awareness.

In India CD is not an uncommon disease but exact prevalence of disease is not known in many states because of lack of awareness about the disease among general population & among pediatricians because the symptoms of CD may have been attributed to many other frequently occurring conditions like recurrent gastrointestinal tract infections, infestations, malnutrition, and nutritional deficiencies.[13] Study suggests that CD in India is more common than previously appreciated; its prevalence being comparable to the West, at least in the

northern parts of the country where wheat is one of the staple food constituents.

The overall prevalence of CD in Bikaner Northwest India is 1.04% but majority of Celiac disease patients are still undiagnosed mainly due to the lack of awareness. Hence there is an urgent need to enhance the awareness of the protean nature of CD.

Since no previous study is available on effect of homoeopathy on celiac disease in adolescents, so there is a need of scientific evaluation of the possibility of homoeopathy as a alternate for the treatment of choice. The research was an effort to evaluate the same by prospectively intervening Individualized homoeopathic medicine in the diagnosed cases of Celiac disease in adolescents.

## ETIOLOGY

The etiology of celiac disease is not known, but environmental, immunologic, and genetic factors all appear to contribute to the disease.

## RISK FACTORS

The overall prevalence of CD is highly dependent on the HLA DQ2/DQ8 typing and gluten consumption. The population with positive HLA typing for celiac have high chances of developing celiac symptoms when on high gluten consumption. However, the population with diabetes, autoimmune disorder or relatives of CD individuals) have even higher risk for the development of CD, since they share the same HLA typing. High risk population for celiac disease includes:-

- Relatives, especially first-degree
- Anemia, especially iron deficiency
- Osteopenic bone disease
- Insulin-dependent diabetes (type 1), especially children
- Liver disorders, especially Autoimmune hepatitis and primary biliary cirrhosis
- Genetic disorders, including down and Turner’s syndrome
- Autoimmune endocrinopathy, especially thyroid disease
- Skin disorders, particularly dermatitis herpetiformis
- Neurological disorders, including ataxia, seizures, myasthenia gravis
- Immunoglobulin A nephropathy

**Table 1: Clinical manifestation of celiac disease.**

| Typical Symptoms | Atypical Symptoms | Associated Conditions |
|---|---|---|
| Chronic diarrhea | Secondary to malabsorption | Possible gluten dependent |
| Failure to thrive | Sideropenic anemia | IDDM |
| Abdominal distention | Short stature | Autoimmue thyroiditis |
| | Osteopenia | Autoimmune hepatitis |
| | Recurrent abortions | Sjogren syndrome |
| | Hepatic steatosis | Addison disease |
| | Recurrent abdominal pain | Autoimmune atrophic gastritis |
| | Gaseousness | Autoimmune emocytopenic diseases |
| | Independentof malabsorption | Gluten independent |
| | Dermatitis herpetiformis | Down syndrome |
| | Dental enamel hypoplasia | Turner syndrome |
| | Ataxia | Williams syndrome |
| | Alopecia | Congenital heart defects |
| | Primary biliary cirrhosis | IgA deficiency |
| | Isolated hypertransaminasemia | |
| | Recurrent aphthous stomatitis | |
| | Myasthenia gravis | |
| | Recurrent pericarditis | |
| | Psoriasis | |
| | Polyneuropathy | |
| | Epilepsy | |
| | Vasculitis | |
| | Dilatative cardiomyopathy | |
| | Hypo/hyperthyroidism | |

**Investigations**

Blood tests - CBC, Tissue Transglutaminase (abbreviated as tTG or TG2), Lipid Profile, Thyroid

Small intestine biopsy

## COMPLICATIONS

1. Cancer: The most important complication of celiac disease is the development of cancer. An increased incidence of both gastrointestinal and nongastrointestinal neoplasms as well as intestinal lymphoma exists in patients with celiac disease.

2. Intestinal ulceration independent of lymphoma.

3. Collagenous sprue: a layer of collagen-like material is present beneath the basement membrane; patients with collagenous sprue generally do not respond to a gluten-free diet and often have a poor prognosis.

4. Refractory sprue.

**REPERTORIAL APPROACH**

HOMOEOPATHIC MEDICAL REPERTORY - ROBIN MUPHY

**Sign & Symptoms of celiac disease**

Celiac Disease tend to have digestive problems.

1. Growth problems

Rubric:- constitution – GROWTH disorders – young people, in

2. Decrease appetite and failure to gain weight

Rubric:- Food – APPETITE, general – diminished

Rubric:- Weakness, wait loss

3. Chronic diarrhoea, which can be bloody

Rubric:- Rectum- Diarrhea, general

Rubric:- Stool - BLOODY

4. Chronic constipation

Rubric:- Rectum – CONSTIPAION, general- chronic

5. Abdominal pain and bloating

Rubric:- Abdominal – Pain, abdominal

6. Vomiting

Rubric:- Stomach – VOMITING, general

7. Weight loss

Rubric:- Weakness, wait loss

8. Delayed Puberty

Rubric:- Constitutions – PUBERTY, aliment in

Rubric:- Children – GROWTH, disorder – young people, in

9. Irritability

Rubric:- Mind – IRRITABILITY, general

10. Depression

Rubric:- Mind – DEPRESSION, sadness

11. Dermatitis herpetiformis

Rubric:- Skin - DERMATITIS

12. Mouth sores

Rubric:- Mouth – sore, pain

**Food - WHEAT, agg.**-*All-c.* ars. bell. **BERB.** bry. *Carb-an. Carb-v. Caust.* chin. coloc. **COP.** euph. *Iris Kali-act. Kali-c. Lach.* **LYC.** nat-c. **NAT-M. NAT-S.** nux-v. *Plb.* psor. *Puls.*

*Pyrog.* rhus-t. sulph.

**Diseases - CELIAC disease-**carc. chin. lyc. phos.

**Intestines - CELIAC, disease-**carc. chin. lyc.

## MIASMSMATIC ANALYSIS

Being an autoimmune pathology, celiac disease is manifestation of psora-syphillis. The diarrhoea of psora are often induced by overeating; the patient being always hungry, of course often eats beyond his capacity of digestion, thus the intestinal digestion is overcrowded, which produces one of nature's own catharsis. The movements are usually watery or consist of imperfectly digested food; quite often they are accompanied with an offensive odor and with colicky pains or with a cutting colic. Tubercular patients may have this morning aggravation in bowel troubles, but it is nevertheless a psoric aggravation, and while psora patients are aggravated by cold, the tubercular persons are still more sensitive, and the effects of colds are more dangerous of life. In sycosis, we see none of this; sycosis usually gives us colic, until we are tired of hearing the patients cry of suffering; occasionally it has diarrhoeas, but if so, they are of a spasmodic, colicky nature, and accompanied with a slimy mucus stool and with griping colic and rectal tenesmus.

Sometimes in the tubercular child, the stools are ashy or grayish in color, showing lack of bile matter. The intestinal pains of sycosis as has been mentioned, are of an extremely colicy nature, and they make the patient angry, as a rule. Sycotic bowel troubles, produce the irritability. They are cross, irritable, with their pains. The bowel difficulties of tubercular children are so frequently accompanied with febrile states, delirium, gastric disturbance, vomiting, purging, with exhaustive, copious stools. These tubercular children are easily and readily known by the numerous diseases they have to contend with in their childhood days.

## MATERIALS AND METHODS

**Study setting** - The present study was undertaken at OPD /IPD of M.N. Homoeopathic Medical College & R.I. Bikaner, Rajasthan.

**Study duration** - The study was undertaken for a period of 12 months, out of which cases was registered in first 7 months and each case was followed up for a period of minimum 3 months, each follow up at 7, 15 days interval done. Analysis and observation done in last 2 months.

**Sample size** - Minimum 60 cases was included in the study by randomize sampling method.

**Inclusion / Exclusion criteria**

**Inclusion criteria**

Cases of adolescent age (10 to 21 age), both sex, any caste, religion and socioeconomic status was included.

Patient suffering from Celiac disease was included in the study

Exclusion criteria

Patient having celiac disease in associated with other autoimmune disorders.

Patients with other systemic disease.

Immunocompetent patients.

Pregnant and lactating women.

**Study deign**

An open label clinical trial.

**INTERVENTION**

Individualized homoeopathic medicine selected on homoeopathic principles Manufacturer- Medicine was procured from a GMP certified company.

Potency- According to patient's susceptibility and homoeopathic principles.

Form- Globules No. 30.

Doses and repetition- According to patient's susceptibility and homoeopathic principles.

Route of administration- Oral

Dispensing- This was done by the certified pharmacist of dispensary of Mangilal Nirban Homoeopathic Medical College And Research Institute, Bikaner, Rajasthan.

**Selection of tools**

1. The Gastrointestinal symptom rating scale (GSRS).
2. Tissue transglutaminase (tTG) antibody, IgA test.
3. Homoeopathic Medical Repertory by Robin Murphy through RADAR 7 Software for repertorization of cases.
4. SPSS software (version 20.0).

**Data collection**

Recording of data-

Data was recorded in approved Case Report Format

Centralized data was collected in approved master chart in proper excel format.

Confidentiality-

All the evaluation forms, reports and other records was kept in locked file cabinet. Any information about the patient was not be leaked out until required.

Maintenance-

There were forms that are completed by for each subject recruited, including two consent form for the patient's information and his/her written consent for the enrolment in the study. These was updated from time to time. Data was maintained in soft and hard copy.

**Data analysis & statistical techniques**

Before treatment- [mean± $SE_m$]

After treatment- [mean± $SE_m$]

Data was analysed by using SPSS software and Excel.

The statistical technique to be used was –'Paired t-test'.

Paired t-test was used to assess the before and after scores in each patient.

**Investigation**

Tissue transglutaminase (tTG) antibody, IgA test

CBC and Blood smear

LFT

Biopsy - Endoscopic biopsy technique

Endomysial entibody (EMA)

InG – tTG

Small bowel macroscopic

Small bowel – histology

**Follow Up (past)**

Patients enrolled in the study would be required to pay visit every $7^{th}$ & $15^{th}$ day or earlier, if needed, for follow up & assessment. In acute exacerbation state, frequency of visit should be on alternate day or earlier. Atleast 6 follow ups of patient will finally assess the case.

No change:

No change in any of the symptoms either in frequency, duration or intensity (FDI).

In case of no change after first or subsequent prescriptions:

In case there is no perceptible improvement after adequate repetition of medicine in different

potencies, we looked for any obstacle for cure and steps may be taken to remove them as far as possible. If no response, refer the case for appropriate medical care.

**Outcome Assessmet**

According to before and after grade of The Gastrointestinal Symptom Rating Scale (GSRS) Questionnaire.

Improvement - improvement seen in tTG levels

Reference interval

| Result (In Units) | Interpretation |
|---|---|
| <20 | Negative |
| 20-30 | Weak Positive |
| >30 | Positive |

Following parameters would be fixed according to the type of the response obtained after the treatment –

Marked Improvement= 75%-100%

Moderate Improvement= 50%-74%

Mild Improvement= 25%-49%

Non significant= <25%

Status quo= 0% Worse

**Statistical Technique and Data analysis**

The data of the patients were assessed as per the defined result assessment criteria. The data analysis was carried out by data sorting method, classification by tabulation and by means of graphs and statistical analysis. Data was analyzed by Excel and SPSS 21.0 version.

The statistical technique used was – 'Paired t-test'.

Paired t-test was used to assess the before and after scores in each patient

**ETHICAL CLEARANCE**

Ethical clearance was obtained from the Institutional Ethics Committee.

**OBSERVATIONS AND RESULT**

A total of 60 patients were enrolled in the study meeting the inclusion and exclusion criteria after screening 100 patients from the hospital OPD. The baseline characteristics of the

participants are given in table 1, shows that mean age of the participants was 10 years. Maximum patients 22 (36.33%) were between the age group 15-18 years years. 33(55%) female patients and 27 (45%) patients are males. Maximum number of patients were from Middle class i.e. 41 (68.33%). 27 (45%) patients suffered from Abdominal pain, 21 (35%) suffered from chronic Vomiting, 19 (31.66%) suffered from Nausea, 19 (31.66%) suffered from Anemia, 19 (31.66%) suffered from Weakness, 17 (28.33%) suffered from Gastritis, 8 (13.33%) suffered from Diarhoea, 7 (11.66%) suffered from Constipation, 4 (6.66%) suffered from Amenorrhea, 3 (5%) suffered from bloody stool. Predominant miasm was Psora 38 (63.33%) followed by Psora – sycosis 9 (15%).

**Table 2: Base Line Characteristics of the Participants.**

| S. No. | Variable | Number of Participants (n=60) |
|---|---|---|
| 1. | AGE | |
| | 10-14 years | 17 (28.33%) |
| | 15-18 years | 22 (36.33%) |
| | 19-21 years | 21 (35%) |
| 2. | GENDER | |
| | Male | 27 (45%) |
| | Female | 33(55%) |
| 3. | SOCIO-ECONOMIC STATUS | |
| | Lower | 8 (13.33%) |
| | Middle | 41 (68.33%) |
| | Upper | 11 (18.33%) |
| 4. | SIGNS AND SYMPTOMS | |
| | Abdominal pain | 27 (45%) |
| | Vomiting | 21 (35%) |
| | Nausea | 19 (31.66%) |
| | Anemia | 19 (31.66%) |
| | Weakness | 19 (31.66%) |
| | Gastritis | 17 (28.33%) |
| | Diarhoea | 8 (13.33%) |
| | Constipation | 7 (11.66%) |
| | Amenorrhea | 4 (6.66%) |
| | Bloody Stool | 3 (5%) |
| 5. | MIASM | |
| | Psora | 38 (63.33%) |
| | Sycosis | 7 (11.66%) |
| | Syphillis | 4 (6.66%) |
| | Psora-sycosis | 9 (15%) |
| | Psora-syphillis | 1 (1.66%) |
| | Syco-syphillis | 1 (1.66%) |

| S. No. | Variable | Number of Participants (n=60) |
|---|---|---|
| 6. | INTERVENTION | |
| | *Ars. Alb.* | 12 (20%) |
| | *Sulph.* | 6 (10%) |
| | *China* | 6 (10%) |
| | *Ipec* | 5 (8.33%) |
| | *Phosphorus* | 5 (8.33%) |
| | *Lyco* | 4 (6.66%) |
| | *Puls.* | 2 (3.33%) |
| | *Podo.* | 3 (5%) |
| | *Acid Nit.* | 2 (3.33%) |
| | *Colo.* | 2 (3.33%) |
| | *Bryo.* | 1 (1.66) |
| | *Carc.* | 1 (1.66) |
| | *Nat.Mur.* | 1 (1.66) |
| | *Cal. Carb.* | 1 (1.66) |
| | *Cactus grandifolia* | 1 (1.66) |
| | *Bacillus gartner* | 1 (1.66) |
| | *Carbo. V.* | 1 (1.66) |
| | *Iris.* | 1 (1.66) |
| | *Kali. C.* | 1 (1.66) |
| | *Nux. V.* | 1 (1.66) |
| | *Rhux. T.* | 1 (1.66) |
| | *Bella.* | 1 (1.66) |
| | *Nat. carb.* | 1 (1.66) |
| 7. | POTENCIES USED | |
| | 30CH | 27 (45.16%) |
| | 200CH | 15 (43.05%) |
| | 1M | 18 (30%) |

**Table 3: Improvement in the Status of Patient After Treatment.**

| | | |
|---|---|---|
| 1. | Improvement in tTG level post treatment | |
| | Marked improvement | 13 |
| | Moderate improvement | 18 |
| | Mild improvement | 14 |
| | Not significant | 7 |
| | Status quo | 2 |
| | Worse | 6 |
| 2. | Improvement in Modified GSRS score post treatment | |
| | Definite | 22 |
| | Probable | 23 |
| | Possible | 9 |
| | Doubtful | 6 |

## DISCUSSION

**Age Incidence**:- The mean age of the participants was 15.5 years. Maximum patients were adolescents that lies between the age group 10-21 years. In the previous study, the prevalence

of CD varies with sex and age, and approximately twice more common in adolescents than in adults.

**Sex Incidence**:- In this study, 27 (45%) patients were male and 33 (55%) patients were females, however this doesn't correlate with the previous studies that shows more prevalence in females.

**Socio – Economic status**:- Maximum number of patients were from Middle class i.e. 41 (68.33%). However in previous study no significant difference was observed when the prevalence was analysed based on socioeconomic background.

**Presenting Complaints as**:- 27 (45%) patients suffered from Abdominal pain, 21 (35%) suffered from chronic Vomiting, 19 (31.66%) suffered from Nausea, 19 (31.66%) suffered from Anemia, 19 (31.66%) suffered from Weakness, 17 (28.33%) suffered from Gastritis, 8 (13.33%) suffered from Diarhoea, 7 (11.66%) suffered from Constipation, 4 (6.66%) suffered from Amenorrhea, 3 (5%) suffered from bloody stool.

**Miasmatic analysis**:- The presenting Predominant miasm was Psora 38 (63.33%) and other miasm were coverd by sycosis 7 (11.66%), syphillis 4 (6.66%), psora-sycosis 9 (15%), psora-syphillis 1 (1.66%), syco-syphillis 1 (1.66%). This correlates with the homoeopathic literature on miasm that indicate psora as the only real fundamental cause and producer of the other numerous forms of disease.

**The tTG level**:- From the observations, it is evident that 60 patients were analysed. marked improvement was observed in 13 (21.66%) patient, 18 (30%) patients showed moderate improvement and 14 (23.33%) showed mild improvement in the tTG level after treatment. 7 (11.66%) patient have no significant improvement, 2 (3.33%) were same and 6 (10%) worsen. definite changes occurred in 22 (36.66%) patients after administration of holistic homoeopathic medicines, 23 (38.33%) patient showed probable change while in 09 (15%) patients possible change can occur due to homoeopathic medicines. In 06 (10%) patients it is doubtful that changes are due to homoeopathic intervention.

**GSRS Scale**:- States that definite changes occurred in 22 patients after administration of holistic homoeopathic medicines, 23 patient showed probable change while in 09 patients possible change can occur due to homoeopathic medicines. In 06 patients it is doubtful that changes are due to homoeopathic intervention.

**Indicated Medicine**:- The medicines found useful in this observational study were *Ars. Alb.12 (20%), Sulph.6 (6%), China 6 (6%), Ipec 5 (8%), Phosphorus 5 (8%), Lyco 4 ((6.66%), Podo 03 (5%), Puls.2 (3%), Acid Nit. 2 (3.33%), Colo. 2 (3.33%), bryo.1 (1.66%), Carc.1 (1.66%), Nat.Mur. 1 (1.66%), Cal Carb 1 (!.66%), Cactus G 1 (1.66%), Carbo.V. 1 (1.66%), Iris 1 (1.66%), Kali.C. 1 (1.66%), Nux.V. 1 (1.66%), R.T. 1 (1.66%), Bell 1 (1.66%), Nat.Carb1 (1.66%), Butyric Acid 1 (1.66%).*

The results were found to be encouraging for *Arsenic album, Sulphur, China, Ipecacuanha and Phosphorus.* Further, the symptoms given in the homoeopathic literature for the above medicines have been clinically verified albeit in a small number of patients highlighting the importance of the holistic approach.

**Potency Selection**:- In maximum patient, 30CH potency 27 (45%) was used followed by 200CH 15 (25%) and 1M 18 (30%) according patient susceptibility and nature of medicine. The strength of this study is that it represents a pragmatic setting of homoeopathic practice which reflects the day to day clinical practice. It also highlights the role of holistic approach in Homoeopathy in managing the cases of celiac disease.

**Area of Residence**:- Since the study was taken up in the OPD which is situated in a rural area, most of the patients included in the study are from urban area 36 (60%) and 24 (40%) are form rural area. It's difficult to draw a fair verdict in terms of occupation, social background and habitation of patients suffering from Celiac disease and it progress. A multi-centric study with inclusion of patients from all segments of society shall be more informative and sharply targeted.

The patient were already on a gluten free diet so the present study could not differentiate whether the results obtained are purely the effect of homoeopathic medicines as the patients could not face the gluten challenge test due to short span off study. Hence, a controlled clinical cross over trial comparing the effects Homoeopathic medicines in patients on gluten free diet and gluten rich diet over long period is warranted.

The detection of these lesions in small intestinal biopsy specimens obtained by upper endoscopy is used to identify CD and is considered to be the gold standard investigation for the diagnosis of the disease. For authentication of findings, this investigation need to be done for patient who do not have tTG level of at least 10 times the upper limit of normal (20U/mL)

In patients with high tTG levels, there is increasing evidence that a small intestinal biopsy is not needed to confirm the diagnosis of CD, as these increased levels are highly suggestive of the disease. This conclusion was also stated in the new ESPGHAN guidelines for the diagnosis of CD in the pediatric population Briefly, these guidelines suggest that in symptomatic individuals who have tTG-IgA levels of at least 10 times the upper limit of normal and who respond well to the gluten free diet, histological confirmation is unnecessary.

For the results integrating holistic Homoeopathic treatment plan, a randomised controlled, multicentric study on large sample size with longer duration and follow up shall be more informative and elaborative.

## CONCLUSION

As the present study is a tiny initiative effort in the direction of evidence based studies dealing with Celiac disease through Holistic approach in Homoeopathy; the aforesaid details are fairly helpful in establishing the significant role of Homoeopathic remedies in managing cases of Celiac disease through Holistic approach. Homoeopathic medicines has a significant role in reducing tTG-IGA value in patients suffering from celiac disease. The mean difference between tTG – IGA value before and after treatment is high, suggest that medicines have significant effect in management of Celiac disease reducing tTG-IGA value. For GSRS, the change was highly statistically significant in treatment. It implies that there is a causal attribution of homeopathic medicine that can be regarded as the cause for the changes occurred in the patient GSRS score.

The most commonly used medicinies were *Ars. Alb., Sulph., China, Ipec., Phosphorus, Lyco.*

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