

An open-label pilot study to explore usefulness of Homoeopathic treatment in nonerosive gastroesophageal reflux disease

Renu Mittal^{1*}, Anil Khurana¹, M. S. Ghosh², Ramesh Bawaskar³, Divya Taneja¹, Sandhya Kashyap¹, Raj K. Manchanda¹

¹Central Council for Research in Homoeopathy, New Delhi, ²Dr. Anjali Chatterjee Regional Research Institute (H), Kolkata, ³Regional Research Institute (H), Mumbai, India

Abstract

Background and Aim: Nonerosive gastroesophageal reflux disease or nonerosive reflux disease (NERD) is characterized by troublesome reflux-related symptoms in the absence of esophageal erosions/breaks at conventional endoscopy. There are a number of medicines cited in homoeopathic literature which can be used for treatment of symptoms such as heartburn and regurgitation. A pilot study was undertaken to explore usefulness of homoeopathic medicines in treatment of NERD. **Methodology:** In this study, 78 patients were screened and 34 were enrolled, having symptoms of heartburn and/or regurgitation at least twice a week, having a gastroesophageal reflux disease (GERD) symptom score of more than 4. Homoeopathic medicine was prescribed on the basis of presenting symptoms. Response to treatment was assessed on GERD symptom score, visual analog scale (VAS) for heartburn, and World Health Organization quality of life-BREF (WHO-QOL) questionnaire evaluated at baseline and at end of 8 weeks of treatment. **Results:** Significant difference was found in pre- and post-treatment GERD symptom score (8.79 ± 2.7 vs. 0.76 ± 1.8 ; $P = 0.001$) and VAS for heartburn (47.47 ± 19.6 vs. 5.06 ± 11.8 ; $P = 0.001$). Statistically significant improvement was seen in three domains of WHO-QOL score, i.e. psychological health, social relationship, and environmental domain. **Conclusion:** The findings are encouraging to open avenues for further studies on reflux disease.

Key words: Gastroesophageal reflux disease symptom score, Homoeopathy, Nonerosive reflux disease, Quality of life

INTRODUCTION

Heartburn and acid regurgitation are typical symptoms of reflux. Gastroesophageal reflux disease (GERD) is a condition which develops when the reflux of stomach contents causes troublesome symptoms and/or complications.^[1] Nonerosive gastroesophageal reflux disease or nonerosive reflux disease (NERD) is subcategory of GERD characterized by troublesome reflux-related symptoms in the absence of esophageal erosions/breaks at conventional endoscopy and without recent acid-suppressive therapy.^[2]

NERD accounts for 50–85% of all GERD diagnoses.^[2] Negative endoscopic findings of NERD patients do not generally correlate with symptom severity. The main pathophysiology of NERD is incomplete gastric acid suppression, resulting in acid exposure to esophagus, greater esophageal hypersensitivity due to hyperosmotic foods, such as cake, chocolate, and alcoholic beverages which cause heartburn.^[3] Reflux of duodenal juice in esophagus, reduced esophageal motility, and sustained

secondary esophageal contractions can also be responsible. It is suggested that ingestion of hyperosmotic foods/drinks loosens the tight junctions between esophageal epithelial cells, and when gastric acid is refluxed, it easily intrudes between epithelial cells and stimulates the terminals of sensory nerves. Reflux of stomach contents is related to transient lower esophageal sphincter relaxation in these patients.^[3]

Studies in the Asian region have shown that older age, males, family history, high socioeconomic status, increased body mass index (BMI), smoking, alcohol use, and hiatus hernia are risk factors for GERD. Three reports from South-East Asia identify that the Indian population is at higher risk for GERD.^[4] Anxiety and depression are strongly associated with reflux symptoms.^[5]

***Address for correspondence:** Dr. Renu Mittal, Central Council for Research in Homoeopathy, 61-65, Institutional Area, Opposite D Block, Janak Puri, New Delhi, India. E-mail: renumittal8@gmail.com

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GERD is also associated with other supraesophageal conditions such as asthma, chronic bronchitis, laryngitis, chronic cough, and atrial fibrillation.^[4,6]

The quality of life (QOL) of NERD patients is quite low.^[3] GERD has an impact on the daily lives of affected individuals, interfering with physical activity, impairing social functioning, mental well-being, disturbing sleep, and reducing productivity at work.^[7] NERD patients have significantly impaired QOL in both physical and mental health status as compared with normal population. It is suggested that GERD might have a more negative impact on patients with NERD than those on erosive esophagitis.^[7]

In nonendoscoped, endoscopy-negative, or low-grade esophagitis patients, initial treatment with a proton pump inhibitor (PPI) is recommended. Step-down treatment is favored as a cost-containment measure, and the use of a half-dose PPI therapy is seen as an attractive long-term therapeutic option. NERD patients seem to have a lower response rate to PPI therapy than patients with erosive esophagitis. A systematic review combining data from seven trials found response rates, after 4 weeks of PPI treatment, of 56% in patients with erosive esophagitis and 37% in NERD patients.^[8]

Prolong use of PPI is associated with several adverse events such as osteoporosis-related hip and spine fractures, community-acquired and nosocomial pneumonia, various enteric and nonenteric infections, and fundic gland polyps.^[9]

In homoeopathic literature, a large number of medicines are mentioned for management of symptoms such as heartburn and regurgitation.^[10-14] However, no studies have been identified in homoeopathy for treatment of NERD. As such, a pilot study was undertaken to identify usefulness of homoeopathic medicines in NERD.

METHODOLOGY

Study Design

This was an open-label pilot study, conducted from September 2014 to August 2015, in accordance with the Declaration of Helsinki^[15] on human experimentation and good clinical practice (GCP) in India. The study was approved by the Ethical Committee of the Council and was registered at clinical trial registry of India (CTRI/2014/02/004426).

Patient and Settings

This study was conducted at the outpatient departments of two research centers, namely, Regional Research Institute (H), Navi Mumbai (Maharashtra), and Dr. Anjali Chatterjee Regional Research Institute (H), Kolkata (West Bengal). The patients coming to the OPD were screened for NERD symptoms. Male and female patients between age group 18–60 years having symptoms of heartburn and/or regurgitation for 6 weeks with at least 2 episodes in a week and symptom score more than 4 on GERD symptom score scale^[16] were enrolled in the study.

Patients with a history of gastrointestinal surgery, dysphagia, peptic ulcer, or associated alarming symptoms such as

gastrointestinal hemorrhage, under any medication, suffering from systemic disease such as cardiac, pulmonary, hepatic or renal disease were excluded from the study. Pregnant or lactating females were also excluded from the study. Patients underwent investigational screening (ultrasonography-whole abdomen and pelvis, electrocardiogram, kidney function test, liver function test, stool for occult blood, absolute eosinophil count, and complete blood count) for ruling out exclusion criteria. Written informed consent was obtained from each patient before inclusion in the study.

A detailed case history was recorded in a predesigned case taking proforma. Factors associated with GERD such as alcohol consumption, smoking, body mass index (BMI), and dietary habits were also recorded. The cases were analyzed and repertorized using RADAR[®] Software. The medicine was selected in consultation with Materia Medica.

Esophagogastroduodenoscopy (EGD) was done in patients who agreed for the investigation to distinguish between erosive and nonerosive GERD and to assess change in EGD after treatment. However, since this was an invasive procedure, it was not mandatory for all patients to undergo the same. Findings of the EGD are reported only for cases who gave consent for investigation before the study and at the end of treatment period.

Outcome Measures

Following outcome parameters were evaluated at baseline and after 8 weeks of treatment.

Gastroesophageal reflux disease symptom score

Symptoms and effect of treatment were evaluated from patient's perspective using the validated GERD symptom score scale.^[16,17] Patients were asked to describe the severity and frequency of two main symptoms, i.e. heartburn (S1) and regurgitation (S2) during previous week using a Likert scale. GERD score was calculated by multiplying the scores for severity and frequency for heartburn and regurgitation separately. The total score was obtained by adding the scores of the 2 individual symptoms (with a minimum of four to maximum of 18). On the basis of total score, the patients were categorized as mild (4–8); moderate (9–13); and severe (14–18) form of GERD. Patients were assessed for change in scores on weekly basis.

Visual analog scale (VAS) (1–100 mm) was also used for assessment of heartburn on weekly basis.

World Health Organization Quality of Life-BREF Questionnaire

QOL information was collected using the instrument World Health Organization QOL-BREF (WHO-QOL-BREF) developed by WHO.^[18] This is a self-administered generic questionnaire with 26 questions, where two are general questions and remaining 24 encompass four domains: Physical, psychological, and social relations and environment. It emphasizes subjective responses rather than objective life conditions, with assessments made based on the

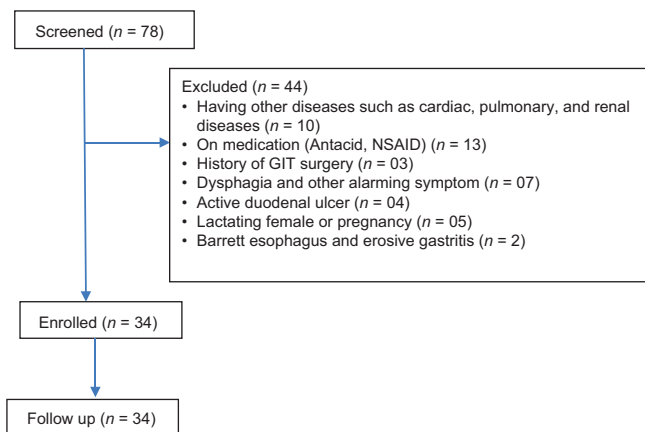


Figure 1: Flowchart

preceding 2 weeks. The response options range from 1 (very dissatisfied/very poor) to 5 (very satisfied/very good). Three questions (pain and discomfort, dependence on medicinal substances, and medical treatment and negative feelings) are scored in an inverse manner. Patients were assessed for change in scores at end of 8 weeks of treatment.

Treatment and Follow-up

The indicated homoeopathic medicine was prescribed in 6C potency initially. The potency was changed as per requirements of the case and according to the homoeopathic principles.

Statistical Analysis

Statistical analysis was done using Statistical Package for the Social Sciences Software (IBM SPSS 20.0 version). Mean values of GERD symptom score and VAS score were compared using repeated measure ANOVA. Change scores of QOL-BREF before and after treatment were compared using paired *t*-test. All values were expressed as *n* (%), mean ± standard deviation. *P* < 0.05 considered statistically significant.

RESULTS

Since this was a pilot study, it was proposed to be conducted on a minimum sample of thirty patients. Seventy-eight patients were screened and 34 patients (22 males; 12 females) were enrolled (considering 10% drop outs). However, there were no dropouts and the data of all 34 cases are presented here [Figure 1].

Baseline Characteristics

Mean age group was 44.2 ± 9.9. Mean BMI was 26.1 ± 5.5 and 23 (68%) were either overweight or obese. All 34 patients suffered from heartburn. Regurgitation was seen in 32 out of 34 patients. Symptom score from 9 to 13 was observed in 38% patients while 62% had symptom score between 4 and 8 [Table 1]. Association with smoking and alcohol consumption was seen in 17.6% (6) patients only. Sleep was disturbed in 20 patients. Twenty-six percent (9) of patients had associated hepatomegaly. Most of the patients felt decrease in their working capacity due to pain and disturbance in sleep.

Table 1: Baseline patient characteristics

Variable category	Number of patients, <i>n</i> (%)
Age (years)	
<40	12 (35.3)
41-45	7 (20.5)
46-50	5 (14.7)
51-55	5 (14.7)
56-60	5 (14.7)
Gender (men:women)	22:12 (65:35)
BMI	
Underweight (<18.5)	02 (5.8)
Normal (18.5-24.9)	9 (26.5)
Overweight (25-29.9)	14 (41.2)
Obese (≥30)	09 (26.5)
Associated factors	
Smoking	06 (17.6)
Alcohol	06 (17.6)
Severity of symptoms based on GERD symptom score	
Mild (4-8)	21 (61.8)
Moderate (9-13)	13 (38.2)
Severe (14-18)	-
EGD findings (n=24)	
Moderate degree of antral gastritis	12
Moderate degree of antral gastritis with erosive duodenitis	3
Moderate degree of antral gastritis with patulous OG junction	6
Moderate degree of antral gastritis with biliary reflux	1
Moderate degree of antral gastritis with patulous OG junction distal esophageal erosion	1
Moderate degree of antral gastritis with duodenitis with grossly deformed duodenal bulb	1
Variable category,	mean±SD
Duration of illness (in weeks)	15.65±8.94
WHO-QOL	
Physical health	51.1±11.4
Psychological health	46.2±8.4
Social relationship	43.6±21.8
Environment	51.6±12.2

EGD: Esophagogastroduodenoscopy; SD: Standard deviation; WHO-QOL: World Health Organization Quality of Life; GERD: Gastroesophageal reflux disease; BMI: Body mass index

Follow-up

The patients were followed up on weekly basis for 8 weeks. The mean GERD symptom score at baseline was 8.79 ± 2.69 and at end of the treatment was reduced to 0.76 ± 1.84. The difference between score was 8.03 ± 3.04 (*P* = 0.001); mean change in VAS score was 42.41 ± 17.38 (*P* = 0.001) [Table 2]. Statistically significant changes from 2nd week onward of treatment were seen. Comparative changes at different time points are given in Figure 2.

Statistically significant improvement was found in QOL in three domains, i.e. psychological health, social relationship,

and environmental domain. No change was seen in the domain of physical health although patients felt better in terms of their working capacity, sleep, and heartburn.

Esophagogastroduodenoscopy Findings

EGD was repeated in ten patients only. Four patients improved (one each of duodenitis with deformed duodenal bulb, erosive duodenitis, antral gastritis, and gastric prolapse). Five patients having gastral antritis remained static and one became worse [Table 3 and Figures 3-6].

Homoeopathic Medicines

Lycopodium clavatum, *Nux vomica*, and *Pulsatilla nigricans* were the commonly indicated medicines [Table 4]. Seven patients were prescribed *Lycopodium* and all were male patients; *Nux vomica* was prescribed in 4 male patients, whereas *Pulsatilla* was prescribed in 1 male and 4 female patients. Less indicated medicines were *Phosphorus* (4), *Cinchona officinalis* (4), *Arsenicum album* (2), and *Sepia* (2).

For each drug, a symptom set has been derived based on the totality of symptoms including prescribing symptoms and other symptoms which were present but not found as the symptoms of that drug in the Synthesis repertory.

DISCUSSION

This was a pilot study to explore the usefulness of homoeopathic medicines in treatment of NERD. The diagnosis was based on two main symptoms, i.e. heartburn and regurgitation, with GERD symptom score of more than 4. In all patients, significant decrease in the symptom

score from the first follow-up assessment was seen. The improvement continued in all the cases in the GERD symptom score and the VAS scale. The changes were seen in the EGD findings as well corresponding to the symptom improvement in 10 cases.

Taking into consideration the variables known to be associated with GERD, nine cases were seen to be obese. There was no change in the obesity during the study. Seven cases reported with high anxiety as they detailed their complaints to the physician. Alcohol and smoking were associated in 17.6% cases. Although six patients said that they had reduced their smoking habits, no actual change in smoking or drinking habits was observed during the study.

A group of homoeopathic medicines has been identified for therapeutic use. All these are Polychrest medicines, and symptoms in the sphere of gastrointestinal system, sleep, and mind were most commonly used to develop the prescribing totality. The medicines prescribed on the basis of totality were associated with improvement in the patients. The findings corroborate with the holistic approach of homoeopathy bringing a general improvement which is hallmark of homoeopathic response when prescribed on totality.

The study also highlights the importance of developing a complete picture totality of the case, specifically taking into consideration mental generals, physical generals, and particular symptoms of the disease. NERD is commonly associated with chronic stress and anxiety, and the mental symptoms of the patients were identified in the same sphere.

Further, other symptoms given in the literature for the drugs have been clinically verified albeit in a small number of patients. Disturbed sleep was stated by twenty patients. It was present in all patients where *Lycopodium* was prescribed. Although *Lycopodium* is not included in the rubric “sleep disturbed” in either the *Kent* repertory or the *Synthesis Repertory*,^[19] but *Lycopodium* is indicated for sleeplessness. The patients, however, reported improvement in this symptom as well. These symptoms need to be validated in a larger number of patients before they are considered as “clinical symptoms” of the drugs.

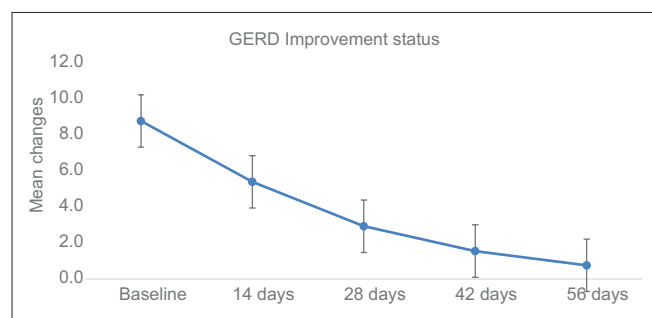


Figure 2: Gastroesophageal reflux disease Improvement status

Table 2: Outcome parameters

	Baseline	Day 14	Day 28	Day 42	Day 56	Test statistic	P
GERD symptom score	8.79±2.69	5.41±3.23	2.94±2.42	1.56±2.13	0.76±1.84	130.298*	0.001
VAS	47.47±19.58	37.56±17.71	27.79±15.83	17.32±13.20	5.06±11.78	126.825*	0.001
WHO-QOL							
Physical health	51.09±11.42	-	-	-	53.91±7.68	-1.225**	0.229
Psychological health	46.24±8.44	-	-	-	55.03±8.42	-5.644**	0.001
Social relationship	43.62±21.81	-	-	-	52.71±14.91	-2.606**	0.014
Environment	51.62±12.15	-	-	-	57.50±10.74	-2.364**	0.024

*Value of F statistic; **Value of t statistic. GERD: Gastroesophageal reflux disease; VAS: Visual analog scale; WHO-QOL: World Health Organization Quality of Life

Table 3: Change in esophagogastroduodenoscopy (n=10)

Case number	Baseline	End of treatment	Remarks
10	Moderate degree of antral gastritis with erosive duodenitis	Moderate degree of antral gastritis	Improvement-Erosive duodenitis was absent at post treatment EGD
11	Duodenitis and antral gastritis with grossly deformed duodenal bulb	Moderate degree of antral gastritis	Marked improvement-duodenitis was absent, and duodenal bulb was normal. No change in antral gastritis
14	Moderate degree of antral gastritis	Mild degree of esophagitis- reflux	Static-antral gastritis was absent, but mild esophagitis with reflux was seen at end of treatment
18	Moderate degree of antral gastritis with patulous OG junction and distal esophageal erosion	Essentially normal study	Marked Improvement-Normal
20	Moderate degree of antral gastritis	Mild degree of esophagitis-? reflux	Static-Antral gastritis was absent, but mild esophagitis with reflux was seen at end of treatment
23	Moderate degree of antral gastritis with patulous OG junction and gastric mucosal prolapse	Moderate degree of antral gastritis with patulous OG junction	Improvement-Gastric mucosal prolapse was not seen at end though antral gastritis with patulous OG junction remained same
27	Moderate degree of antral gastritis	Mild degree of esophagitis with patulous OG junction and gastric mucosal prolapse	Worse: The changes show mild degree of esophagitis with patulous OG junction though antral gastritis
29	Moderate degree of antral gastritis with biliary reflux	Mild degree of esophagitis-? reflux	Static-no much change seen from baseline
35	Moderate degree of antral gastritis	Moderate degree of antral gastritis	Static-no change
36	Moderate degree of antral gastritis	Moderate degree of antral gastritis	Static-no change

EGD: Esophagogastroduodenoscopy

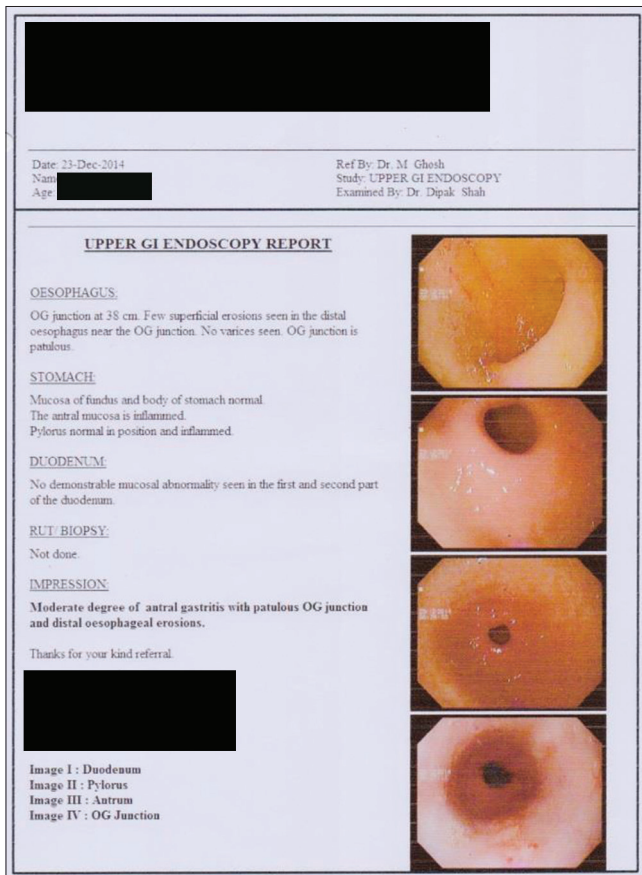


Figure 3: EGD findings of Case no. 18 before treatment

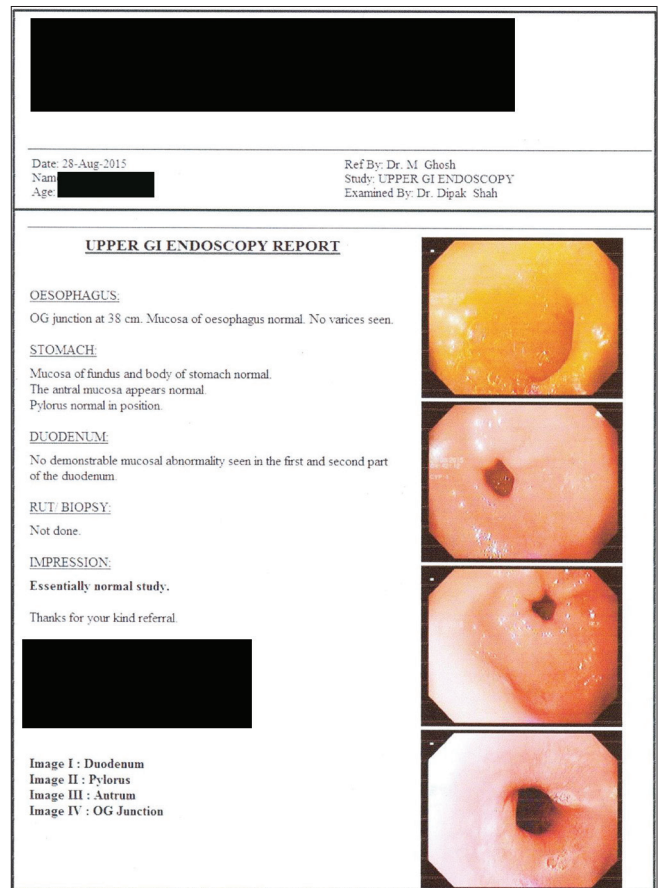


Figure 4: EGD findings of Case no. 18 after treatment

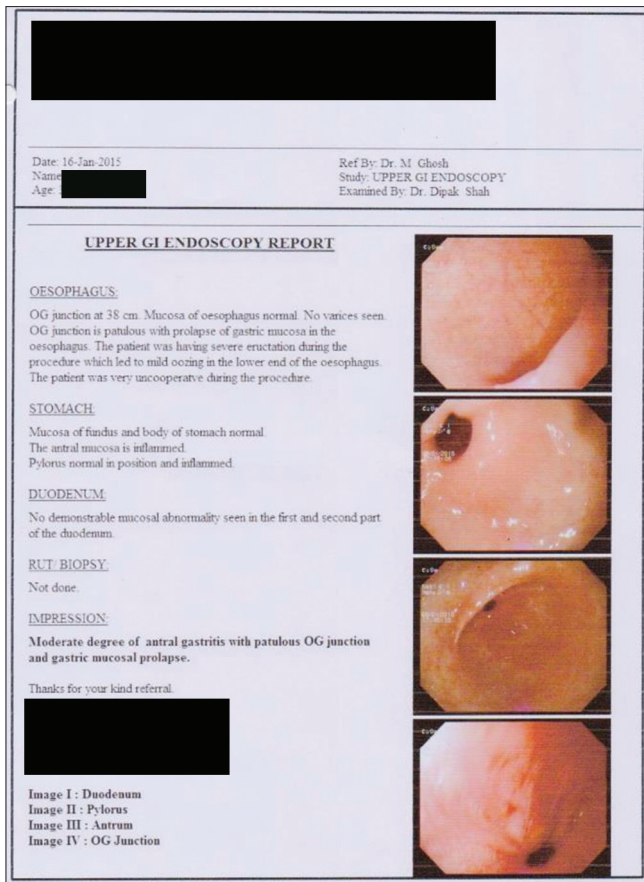


Figure 5: EGD findings of Case no. 23 after treatment

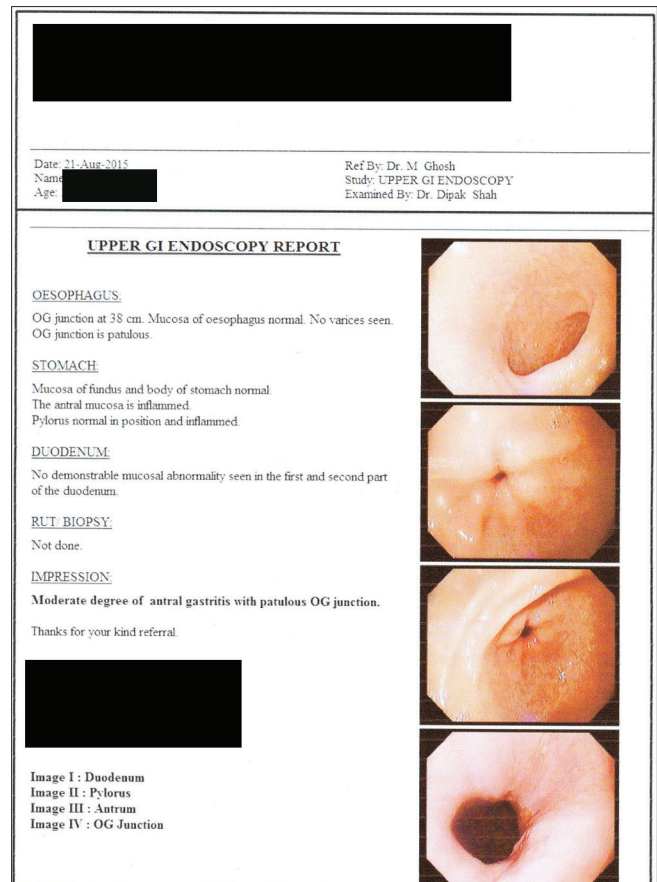


Figure 6: EGD findings of Case no. 23 after treatment

Similarly, sour taste was stated by 22 patients. Researching and applying likelihood ratio will further validate the prescribing value in terms of expected clinical response.^[20] The sample size in this study, however, was too limited to draw specific conclusions on the likelihood ratio of prescribing.

QOL assessed on WHO-QOL-BREF score showed statistically significant improvement post treatment. In individual domains, improvement was seen in psychological, social, and environmental level. The patients were more socially active, were emotionally better, and reported with increased working capacity and better sleep. No studies were found in the literature, which identify the correlation and association between the GERD score and WHO-QOL.

As per available literature, NERD is most likely associated with *Helicobacter pylori* infection.^[21] Studies also show that *H. pylori* infection usually causes antral gastritis and is seen to be negatively associated with erosive esophagitis. Although, not an objective of this study, the EGD findings in 24 patients showed antral gastritis of mild to severe degree. This corroborates with the findings that NERD associated with antral gastritis without esophagitis is most likely due to *H. pylori* infection. This aspect opens further avenues for

undertaking research using homoeopathic intervention on *H. pylori* infections.

The study has its limitation in terms of small sample size, absence of control group, and lack of laboratory evidence of improvement in all cases. EGD has not repeated in all patients as patients were not willing to go for repeat EGD which is an uncomfortable invasive procedure.

CONCLUSION

The study has explored the usefulness of homoeopathic medicines in treatment of NERD and helpful in improving the Quality of life of the patients. The findings are encouraging enough to open avenues for further studies to draw strong evidence on reflux disease and gastric *H. pylori* infections.

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Table 4: Set of symptoms derived on the basis of totality of symptoms in individual cases of the indicated medicine

Medicine	Symptoms			
	Mental general	Physical general	Particulars	Others
Lycopodium clavatum (n=7)	Desire company (n=4) Irritable (n=2) Nervous (n=1) Changing mood (n=1) Financial worry (n=1) Aversion to company (n=1) Dogmatic (n=1)	Hot patient (n=4) <i>Appetite diminished</i> (n=3) Cannot tolerate hunger (n=1) Taste sour (n=5) <i>Taste sour in morning & night</i> (n=1) <i>Taste bitter in morning</i> (n=2) <i>Desire cold food</i> (n=5) Desire sour food (n=1) <i>Aversion bread</i> (n=3) <i>Intolerance fatty food</i> (n=3) <i>Thirst less</i> (n=1) <i>Perspiration profuse after eating</i> (n=4) Perspiration profuse (n=2) Perspiration agg.(n=1)	Heartburn (n=7) Heartburn eating after (n=4) Regurgitation (n=6) Eructation (n=6) <i>Eructation <eating after</i> (n=4) <i>Eructation bitter</i> (n=2) Eructation sour (n=1) Eructation empty (n=1) Eructation at night (n=1) Flatulence with fullness sensation (n=6) Flatulence from cabbage (n=4) Flatulence <after eating (n=2) Constipation (n=6) Stool hard (n=2) <i>Pain in abdomen <eating</i> (n=1) Haemorrhoid (n=1) Urine involuntary (n=3) Weakness (n=2)	Forsaken feeling (n=1) Sleep disturbed (n=7) Desire fatty & pungent food (n=3) Desire potato (n=1) Intolerance spicy food (n=1) Heartburn <evening, night (n=6) Flatulence >passing flatus (n=1)
Nux vomica (n=4)	<i>Aversion from company</i> (n=3) Anxious (n=2) <i>Anxious about future</i> (n=1) Cannot tolerate injustice (n=1)	Appetite diminished (n=3) Desire meat (n=4) Desire spices (n=2) <i>Intolerance from milk</i> (n=3) Aversion sour food (n=2) Sour taste (n=3) Sour taste <morning & night (n=1) Bitter taste in mouth (n=1) <i>Perspiration profuse</i> , (n=3)	Heartburn (n=4) Heartburn <night,(n=4) Regurgitation (n=5) eructation (n=1) Empty eructation<at night (n=1) Constipation (n=4) Stool soft (n=3) Stool hard (n=1) Flatulence <after eating (n=2) Flatulence <afternoon (n=2) Fullness sensation in abdomen (n=1) Flatus difficult to pass (n=1) Indigestion (n=1) Nauseated feeling at night (n=1) <i>Urine offensive</i> (n=3) General weakness (n=1)	Easily irritable (n=1) Excited easily (n=1) Perspiration staining linen yellow (n=3) Intolerance from bitter food (n=2) Sleep disturbed (n=1) Aversion potatoes (n=1) Heartburn <evening (n=5) Eructation <rich food (n=2)
Pulsatilla nigricans (n=5)	Forsaken feeling (n=1) Affectionate (n=1) Sensitive nature (n=1) Weeping disposition (n=1) Desire for open air (n=1) Irritable (n=1) <i>Desire company</i> (n=1) <i>Concentration difficult</i> (n=1) Confusion (n=1) Memory weak (n=1)	Appetite diminished (n=2) Desire cold food (n=1) <i>Desire spices</i> (n=3) <i>Desire egg</i> (n=1) <i>Desire sour food</i> (n=1) <i>Desire sweet</i> (n=1) Aggravation from fat (n=2) <i>Aggravation from meat</i> (n=1) Sour taste (n=1) <i>Sour taste in morning</i> (n=1) Salty taste (n=1) Thirstless (n=1) Sleep disturbed (n=3) <i>Perspiration profuse</i> (n=2) Perspiration eating after (n=1)	Heartburn (n=5) Regurgitation (n=4) Eructation <night (n=2) <i>Eructation from rich food</i> (n=2) Eructation afternoon (n=1) Nausea during morning (n=1) Flatulence (n=3) Flatulence <eating after (n=1) Flatus difficult to pass (n=1) Constipation (n=5) Stool hard (n=2) Stool soft (n=1) Haemorrhoid (n=1) Palpitation of heart after eating (n=1) Involuntary urination (n=1)	Anger easily (n=1) Aversion from sour food (n=1) Aggravation from spices (n=1) Aggravation from bitter food (n=1) Bitter taste during night (n=1) Bitter taste with nauseated feeling (n=1) Salivation profuse in morning (n=1) Heartburn <evening & night (n=3)

Contd..

Table 4: Contd...

Medicine	Symptoms			
	Mental general	Physical general	Particulars	Others
Phosphorus (n=4)	Desire company (n=2) Irritable (n=2) Concentration difficult (n=1) <i>Mild (n=1)</i> Fastidious (n=1) Hurry (n=1) Anxiety without cause (n=1)	Appetite diminished (n=1) Desire salty things (n=1) Desire cold food (n=1) Desire spices (n=1) <i>Desire sour food (n=1)</i> Desire fish (n=1) Desire fatty food (n=1) Desire pungent things (n=1) Desire meat (n=1) <i>Aversion from potatoes (n=1)</i> <i>Aversion from bread (n=1)</i> <i>Intolerance from milk (n=1)</i> Intolerance from spices (n=1) Intolerance from cabbage (n=1) Intolerance from spices (n=1) <i>Sour taste (n=4)</i> Sour taste in morning (n=1) <i>Salivation dribbling from mouth (n=1)</i> Sleeplessness (n=1) Sleep right side (n=1) Perspiration eating after (n=1)	<i>Heartburn (n=4)</i> Heartburn at night (n=2) Heartburn at afternoon (n=1) Heartburn sleep during (n=1) Regurgitation (n=4) Eructation (n=2) Flatulence with fullness sensation < eating after (n=2) Haemorrhoid (n=1) Constipation (n=3) Mucoid stool (n=1) Stool dry & hard (n=1) Fullness sensation in bladder (n=1) Burning urination (n=1)	Heartburn afternoon (n=1) Heartburn after eating (n=1) Heartburn from sour food (n=1) Eructation < after sleep (n=2) Eructation from sour food (n=1) Eructation > from cold water (n=1) Sleep disturbed (n=3) Sour taste afternoon (n=1) Taste sour & bitter (n=1) Heartburn eating after (n=1) Eructation from rich food (n=1)
Cinchona officinalis (n=4)	<i>Aversion from company (n=4)</i> <i>Irritable (n=2)</i> Anxiety (n=1)	Appetite diminished (n=4) <i>Desire salty food (n=2)</i> Desire spices (n=1) Desire delicacies (n=1) Sugar desire (n=1) Aversion from sour food (n=1) Intolerance milk (n=2) <i>Intolerance from meat (n=2)</i> <i>Sour taste (n=3)</i> Perspiration profuse (n=2) <i>Perspiration staining yellow (n=2)</i> Sweat having sour odour (n=1)	<i>Heartburn (n=4)</i> Heartburn eating after (n=1) Regurgitation (n=4) Eructation (n=1) Flatulence eating after (n=1) Flatulence at afternoon (n=1) <i>Constipation < from tea (n=2)</i> <i>Stool soft (n=1)</i> Urine offensive (n=1)	Desire meat (n=2) Taste sour in evening (n=2) Taste sour eating after (n=1) Disturbed sleep (n=2) Heartburn in evening (n=4) Eructation from rich food (n=2)
Arsenicum album (n=2)	Anxious (n=2) Fear of death (n=1) Desire company (n=1)	Appetite increase (n=1) Appetite diminished (n=1) <i>Desire cold food & drink (n=2)</i> Intolerance from fruit (n=2) Thirst for large quantity of water (n=1) Perspiration during anxiety (n=2)	<i>Heartburn (n=2)</i> Regurgitation (n=2) <i>Sour eructation (n=1)</i>	Heartburn from eating (n=2) Heartburn at night (n=1) Eructation aggravate after eating (n=1) Flatulence after eating (n=1)

Contd..

Table 4: Contd...

Medicine	Symptoms			
	Mental general	Physical general	Particulars	Others
Sepia (n=2)	Cannot tolerate contradiction (n=2) Consolation aggravate (n=2) <i>Mild (n=1)</i> Anger easily (n=1)	Chilly patient (n=2) <i>Sleep disturbed (n=1)</i> Appetite diminished (n=1) Desire bitter food (n=1) Desire fish (n=1) Desire spices (n=1) Intolerance from milk (n=2) Intolerance from vegetable (n=1) Perspiration profuse (n=2) Perspiration with offensive odour (n=1) <i>Tongue white coated (n=2)</i> Hot patient (n=2) Sleep disturbed (n=1)	<i>Heartburn (n=2)</i> Heartburn afternoon (n=2) Regurgitation (n=1) Stool hard (n=1) <i>Pain after stool (n=1)</i>	Desire egg (n=1)
Natrum Muriaticum (n=2)	Consolation aggravation (n=1) Confused mind (n=1) <i>Memory weak (n=1)</i> <i>Affectionate (n=1)</i> <i>Cannot tolerate contradiction (n=1)</i> Anger easily (n=1)	Hot patient (n=2) Appetite diminished (n=2) <i>Desire fish (n=1)</i> <i>Desire bitter food (n=1)</i> <i>Desire sour food (n=1)</i> Sleep disturbed (n=1) Perspiration after eating (n=1)	<i>Heartburn (n=2)</i> <i>Heartburn eating after (n=1)</i> <i>Regurgitation (n=2)</i> Sour eructation (n=1) <i>Flatulence eating after (n=1)</i> <i>Palpitation of heart after eating (n=1)</i> Constipation (n=1) Involuntary Urination (n=1)	Salty taste (n=1) Heartburn in morning (n=1) Sour eructation in morning (n=1)
Argentum nitricum (n=1)	<i>Aversion from company</i> <i>Irritable</i>	<i>Diminished appetite</i> Desire salty things Desire sugar Intolerance from meat Sour taste Perspiration profuse Sleep disturbed	Heartburn Heartburn in evening Regurgitation Eructation eating after Constipation Involuntary urination	
Sulphur (n=1)	Anxious <i>Aversion from company</i>	Diminished appetite <i>Desire meat</i> Desire spices <i>Aversion sour food</i> Intolerance milk <i>Sour taste</i> <i>Perspiration profuse</i>	<i>Heartburn</i> Heartburn<evening Regurgitation Eructation eating after Flatulence eating after Constipation Stool soft Urine offensive	
Sulphuric acid (n=1)	Irritable while talking (n=1) Confusion of mind scratches head right side	Desire sour food Perspiration eating after	<i>Heartburn</i> <i>Eructation bitter</i> Regurgitation Constipation Involuntary urination	
Medorrhinum (n=1)	Hurry in every activity <i>Impatience</i>	Chilly patient Desire sour acid Desire sweet Sleep lying on abdomen	Hawk disposition Burning sensation in epigastrium Heartburn Regurgitation Eructation ineffectual Burning feet	

Grading of symptoms in bold, italics and normal text is as per the Synthesis Repertory

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Conflicts of Interest

There are no conflicts of interest.

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गैर-अपरदनकारी ग्रास नली प्रतिवाह रोग (नर्ड) में होम्योपैथी उपचार की उपयोगिता की पहचान करने के लिए एक खुला लेबल अध्ययन

पृष्ठभूमि एवं उद्देश्य

गैर अपरदनकारी ग्रास-नली प्रतिवाह रोग (नर्ड) परंपरागत एंडोस्कोपी पर ग्रास-नली क्षरण की अनुपस्थिति में होने वाले कष्टप्रद प्रतिवाह सम्बंधी लक्षणों के द्वारा चिन्हित होता है। होम्योपैथिक साहित्य में ऐसी असंख्य औषधियाँ उद्धृत की गयी हैं जिनका प्रयोग हृदय-जलन एवं उल्टी जैसे लक्षणों के उपचार के लिए किया जा सकता है। नर्ड के उपचार में होम्योपैथी की औषधियों की उपयोगिता का पता लगाने के लिए एक प्रारंभिक अध्ययन किया गया था।

विधि

इस अध्ययन में 78 रोगियों की आरंभिक जांच की गई एवं और सप्ताह में कम से कम दो बार हृदय-जलन और/या उल्टी के लक्षण प्रदर्शित करने वाले रोगी जिनका गर्द लक्षण अंक 4 से अधिक था, ऐसे 34 रोगियों का नाम दर्ज किया गया। होम्योपैथिक औषधि का निर्धारण प्रत्यक्ष लक्षणों के आधार पर किया गया। चिकित्सा के प्रति असर का आंकलन आधार-रेखा (चिकित्सा आरम्भ होने से समय) और चिकित्सा के 8 सप्ताह के अंत होने पर गर्द लक्षण अंक, हृदय-जलन के लिए वैस एवं डब्ल्यूएचओक्यूओएल-ब्रेफ प्रश्नावली के आधार पर किया गया।

परिणाम

चिकित्सा से पूर्व और पश्चात् के गर्द लक्षण अंक (2.7±8.79 की तुलना में; 1.8±0.76 पी=0.001) एवं हृदय जलन के लिए वैस (19.6±47.47 की तुलना में; 11.8±5.06 पी=0.001) में उल्लेखनीय अंतर पाया गया। डब्ल्यू एच ओ-क्यूओएल अंक के तीन अधिकार-क्षेत्रों अर्थात् मानसिक स्वास्थ्य, सामाजिक संबंध और वातावरण क्षेत्र में सांख्यिकीय रूप से उल्लेखनीय अंतर देखा गया।

निष्कर्ष

ये परिणाम प्रतिवाह रोग पर आगे के अध्ययन हेतु मार्ग प्रशस्त करने के लिए उत्साहजनक हैं।

Estudio de diseño abierto para identificar la utilidad del tratamiento homeopático en la enfermedad de reflujo gastroesofágico no erosivo (erne)

RESUMEN

Fundamento y objetivos: La enfermedad de reflujo gastroesofágico no erosivo (ERNE) se caracteriza por síntomas relacionados con las molestias por el reflujo en ausencia de erosiones esofágicas en la endoscopia convencional y sin tratamiento antiácido reciente. Existen una serie de medicamentos mencionados en la bibliografía homeopática que pueden utilizarse para el tratamiento de los síntomas como pirosis y regurgitación. Se ha realizado un estudio piloto para examinar la utilidad de los medicamentos homeopáticos en la ERNE

Método: Para este estudio, se seleccionaron 78 pacientes de los que se incluyeron 34 con síntomas de pirosis y/o regurgitación al menos dos veces a la semana y una puntuación de síntomas de ERGE de más de 4. Los medicamentos homeopáticos se prescribieron sobre la base de los síntomas manifiestos. La respuesta al tratamiento se evaluó con la puntuación de síntomas de ERGE, la VAS para la pirosis y el cuestionario WHOQOL-BREF. Las evaluaciones se realizaron al principio y al final de las 8 semanas de tratamiento.

Resultado: Se observe una diferencia significativa en la puntuación de los síntomas ERGE antes y después del tratamiento ($8,79 \pm 2,7$ frente a $0,76 \pm 1,8$; $p = 0,001$) y VAS para la pirosis ($47,47 \pm 19,6$ frente a $5,06 \pm 11,8$; $p = 0,001$). Se constató una mejora estadísticamente significativa en los tres dominios de la puntuación WHO-QOL, es decir, los dominios de salud psicológica, de relación social y del entorno.

Conclusiones: Los resultados animan a abrir nuevas vías para posteriores estudios sobre la enfermedad de reflujo.