

## Review Article

# Digestive Disorders and Electrohomeopathy Approach

### Abstract

This particular review discusses the basic fundamentals of Electrohomeopathy medicine and its clinical finding related to in functional gastrointestinal diseases (FGID). Though functional gastrointestinal diseases (FGID) are complex group of disorders which affect all parts of gastrointestinal system, this remedy corrects the pathogenesis of multiple symptoms from multi factorial causes. Each remedy of Electrohomeopathy medicine consists of complexly spagyric essence intermixed with a variable proportions of multiple bioactive constituents of medicinal plants. Therefore the information intended as a starting line to keep up the Electrohomeopathy remedies for FGID which are rationally combined with multiple compounds. It is established as evident based therapeutic option for FGID. This review article, therefore, summarizes the basic knowledge of Electrohomeopathy medicines used in selected functional gastrointestinal disorders (FGIDs) and correlates them with the constituents of medicinal plants. Therefore, the information presented here is intended as a starting point to support the claim that FGID is one of the most important indications in Electrohomeopathy and rationally combined herbal extraction are established evidence-based therapeutic options. The review justifies that the Electrohomeopathy treatment of gastrointestinal disorders is found promising with reliable scientific evidence.

**Key words: Electrohomeopathy, Functional gastrointestinal disorder, Dyspepsia, IBS**

### 1. INTRODUCTION

Gastrointestinal (GI) disorders are estimated to be frequent among the general population and the worldwide prevalence of gastrointestinal diseases is about 40% [1]. Various types of traditional and complementary therapies can be used for prevention and treatment of many diseases and conditions, including GI complaints. It appears that the use of various Traditional complementary medicines are prevalent among patients with GI diseases [2]. Some of these include Acupuncture, Ayurveda, Homeopathy, Siddha, Unani, Chinese, Phytotherapy, Nutraceuticals, and many others including Electrohomeopathy. Electrohomeopathy medicines are widely accepted and used by the local practitioners to treat structural as well as the functional gastrointestinal diseases. But this review mainly focuses on the functional gastrointestinal diseases (FGID) which are being treated by Electrohomeopathy medicines. This review also focuses on the different plants used in Electrohomeopathy medicines responsible for their curative action in gastrointestinal disorders.

#### 1.1 Electrohomeopathy medical system.





**Table: 2. Spagyric essence of different plants used in Vermifugo group with specific parts.**

Sl. No.	Components	VER-1	VER-2
1.	<i>Allium sativum</i>	30 part	30 part
2.	<i>Chenopodium anthelminthicum</i>	05 part	20 part
3.	<i>Ruta gaveloens</i>	20 part	10 part
4.	<i>Dictamnus albus</i>	20 part	-
5.	<i>Thymus serpyllum</i>	20 part	-
6.	<i>Imperatoria osthrutium</i>	20 part	-
7.	<i>Euphorobium officinalale</i>	05 part	-
8.	<i>Artimisia cina</i>	-	30 part
9.	<i>Spigelia anthelmia</i>	-	20 part
10	<i>Tanacetum vulgare</i>	-	20 part

#### **4. Role of Electrohomeo therapy in functional gastrointestinal disorders (FGID).**

Digestive disorders or gastrointestinal disorders including Functional gastrointestinal disorders (FGIDs) are a group of diseases with different combinations of chronic gastrointestinal (GI) symptoms which are usually recurrent and are not explained by structural or biochemical abnormalities. FGIDs diseases include gastroesophageal reflux disease (GERD), functional dyspepsia (FD), irritable bowel syndrome (IBS), constipation, abdominal pain, diarrhoea, acidity and heartburn etc [7].

##### **4.1. Role of Electrohomeo therapy Scrofoloso-1(S-1), Scrofoloso-2(S-2), Scrofoloso-10(S-10) in Gastroesophageal reflux disease (GERD).**

GERD is a chronic disease that takes place when gastric acid or bile flows into the oesophagus and irritates the lining. Acid reflux and heartburn more than twice a week may indicate GERD. It has been proved that the plant *Hydrastis can.*, *Strychnos nuxvomica* and Lycopodium are highly efficient to treat GERD [8, 9, and 10]. Similarly Cinchona is used as an appetizer, promoting the release of gastric juices; and treating bloating, fullness, and other stomach problems [11, 12]. Usually the local Electrohomeo practitioners use the Electrohomeopathy medicine S1, or S2 or S10 for the treatment of GERD. As *Hydrastis Canadensis* is a constituent of all S1, S2 and S10 medicines, the use of aforesaid medicines for the treatment of GERD is quite rational. Moreover the *Strychnos nuxvomica* and Lycopodium are the constituents of S1 and S2 respectively. Along with Hydrastis, Nuxvomica for S1 and Lycopodium for S2 multiply the action for their corresponding group for the treatment of GERD. Cinchona is used for increasing appetite; promoting the release of digestive juices; and treating bloating, fullness, and other stomach problems. Cinchona is an important constituent of S10. So it is quite justified to use S1, S2 and S10 individually or combinable for the treatment of GERD.

##### **4.2. Role of Electrohomeo therapy Scrofoloso-1(S-1) and Scrofoloso-10(S-10) in functional dyspepsia.**

Functional Dyspepsia (FD) is a gastro-intestinal disorder causing diverse symptoms such as abdomen fullness, bloating and nausea in the upper abdomen [13]. In past years, herbal treatments in general and for FD in particular have received satisfactory result. To treat FD symptoms, various herbal medicines have been examined. Most of the medicines obtained this way are the rational combinations of several plants [14]. Nuxvomica, and Cinchona are widely used to treat functional dyspepsia [15, 16]. The local Electrohomeopathic practitioners use S1, and S10 for the treatment of dyspepsia. As GERD is the principle cause of dyspepsia, the treatment by S1 and S10 for dyspepsia is quite justified because S1 contain Nuxvomica and S10 contain Cinchona.

#### **4.3 Role of Electrohomeo therapy SLASS and S-11 in Irritable bowel syndrome (IBS).**

Irritable Bowel Syndrome (IBS) is a chronic digestive disorder, which is characterized by abdominal pain, bloating, diarrhoea and constipation [17]. Herbal plant Aloe leaves contain a transparent gel which is most commonly used as a curative effect [18]. *Melissa officinalis* is another plant that is quite effective for the management of IBS [19]. As per Electrohomeo therapy for IBS is concerned, SLASS is the primary remedy as it contains Aloe. S-11 is also used to counter nausea and vomiting tendency IBS as it contain *Melissa officinalis*. Thus the use of SLASS for the treatment of IBS is justified.

#### **4.4 Role of Electrohomeo therapy SLASS in constipation.**

Constipation is characterized by a variety of bowel symptoms such as difficulty passing stool, hard stool, and a feeling of incomplete evacuation [20]. Herbal medicines are frequently used to treat constipation for a long time [21]. The herbal medicine aloe has a tremendous effect on constipation [22]. Another herbal medicine *Gentiana lutea* also quite popular for the treatment of constipation [23]. Electrohomeopathy medicine SLASS is quite specific to treat constipation. As SLASS contain both Aloe and Gentiana as their principal constituent, so it is quite justified for the practitioners to treat constipation by SLASS.

#### **4.5 Role of Electrohomeo therapy Scrofoloso-3(S-3) in Diarrhoea.**

The United Nations Children's Fund and World Health Organization (UNICEF/WHO, 2009) defined diarrhoea as having loose or watery stools at least three times per day or more frequently than normal for an individual [24]. The wide variety of plants that are used to treat diarrhoea in this area supports the traditional value that medicinal plants have in the primary health care system [25]. The herbal plant *Matricaria chamomilla* is quite effective for diarrhoea treatment [26]. Electrohomeopathy medicine S -3 has specific affinity for diarrheal cure. As it contains *Matricaria chamomilla*. The use of it is justified in the treatment of diarrhoea.

#### **4.6 Role of Electrohomeo therapy Scrofoloso-11(S-11) in vomiting.**

The contractions of stomach muscle walls result in a large amount of stomach contents pushing upward and flow back into the oesophagus, exiting through the mouth and termed as vomiting [27]. The types of herbs used to prevent and treat nausea and vomiting were ginger, chamomile, mint, and cardamom [28]. Herbal medicine *Melissa officinalis* has been proved

for the treatment of nausea and vomiting [29]. Another herbal plant *Lobelia inflata* (Indian tobacco) contains lobeline and other pyridine alkaloids and has been used as an emetic [30]. In Electrohomeopathy, S-11 is often given to treat nausea and vomiting. As S-11 contains *Mellissa officinalis* and lobelia, the use of S-11 as antiemetic is justified.

#### **4.7 Role of Electrohomeo therapy Vermifugo-19 (VER-1) and Vermifugo-2 (VER-2) in Helminthiasis.**

The parasitic worms or helminthes that sustain on a living host to get nourishment and protection, while causing poor nutrient absorption, weakness and disease in the host. The worms live in the gastrointestinal tract, liver and other organs [31]. The use of medicinal plants for the prevention and treatment of gastro-intestinal parasitism has its origin in ethno veterinary medicine [32]. *Chenopodium anthelminthicum*, *Dictamnus albus*, *Artemisia cina* and *Spigelia anthelmia* are the potential herbs which possess antihelminthic activity [33 - 36]. Electrohomeopathy medicine VER-1 and VER-2 are given for the treatment of helminthiasis. As VER-1 and VER-2 contains above said plants it is justified to use VER-1 and VER-2 as antihelminthic therapy.

#### **4.8 Role of Electrohomeo therapy Scrofoloso-5(S-5) in liver disease.**

Hepatic disease or liver disease is the disease that negatively affects the normal, proper performance of the liver. Herbal medicines have been used in the treatment of liver diseases for a long time [37]. *Berberis vulgaris* is a potent plant that possesses hepatoprotective activity [38]. In Electrohomeopathy S-5 is given as a liver remedy. As this medicine contains *Berberis vulgaris*, the use is justified. Moreover the hepatoprotective activity of Electrohomeopathic drug S-5 is already proved [39].

#### **4.9 Role of Electrohomeo therapy Cancerous -15 (C-15) in Peptic ulcer.**

Peptic ulcers or gastric ulcers are open sores that develop on the inside lining of the stomach and the upper portion of your small intestine. Several reports have demonstrated that plant medicines can effectively treat peptic ulcer in humans and various animal models via divergent mechanisms [40]. The effective treatment of peptic ulcer by Electrohomeopathy C-15 is already proved [41].

#### **4.10 Role of Electrohomeo therapy Scrofoloso-10 (S-10) in Haemorrhoids.**

Haemorrhoids or piles is often considered as one of the common gastrointestinal diseases with a high preponderance. [42] Haemorrhoids are swollen veins in the lower part of the anus and rectum. When the walls of these vessels stretch, they become irritated. Herbal medicines are very much effective for treatment of haemorrhoids. *Aesculus hippocastanum* (horse chestnut) has been used for centuries as a treatment for dysentery, bronchitis, hemorrhoids, and venous problems in folk medicine [43]. The extract of this *Aesculus hippocastanum* is found to contain an excellent enzyme, namely aescin is known to show anti-inflammatory properties which can be used in curing the problem of piles [44]. Electrohomeopathy medicine S-10 is widely used for treatment of haemorrhoids. As S-10 contains Aesculus, the therapy for haemorrhoids is justified.

### 5.1 Possible target of action of plants in the Electrohomeopathy Scrofoloso group in Gastrointestinal disorder.

*Cochlearia officinale* is a prominent constituent of almost all Scrofoloso series and plays an important role for treatment of several gastrointestinal disorders. cochlearine and myrosin are two important constituents which act as gastro protective against several diseases [45]. Berberine and Hydrastin are prominent phytoconstituents of hydrastis have curative potential in gastrointestinal disorder and gastroesophageal reflux disease [46]. The saponin and flavonoids of *Scrophularia nodosa* possesses a good antispasmodic effect which is found useful in abdominal pain [47]. The phytoconstituents of *Smilax medica* contain Steroidal Saponins which have good antifungal activity and protect GI tract from any possible fungal infection [48]. The pyrrolizidine alkaloids Senecionine and senkirkinine are potent phytoconstituents of *Tussilago farefara* exhibit prominent gastro and respiratory protective activity [49] *Veronica officinalis* contain Verproside which is famous for stomach and intestine disorder. Traditionally used *Veronica officinalis* inhibits pro-inflammatory mediators via the NF- $\kappa$ B signalling pathway [50]. The phytoconstituents of *Matricaria chamomilla* are Sesquiterpenes, flavonoids, coumarins, and polyacetylenes which are responsible for the biological effect like antispasmodic, and hepatoprotective [51]. The alkaloids, flavonoids, saponins and terpenoids of *Nasturtium officinalis* collectively exhibit Hepatoprotective activity [52]. *Strychnos nuxvomica* contain Strychninine and Brucine which are used for dyspepsia and other GI disorders [53]. The lycopodine, lycoflexine exhibits hepatoprotective activity of lycopodium. [54]. Rheum contains anthraquinone which shows purgative/cathartic, stomachic activity [55]. *Berberis vulgaris* contains berberine, berbamine which exhibit its efficacy as choleric, laxative, anti-diarrhoeal and anti-hepatitis. [56]. *Solidago virgaurea* contain terpenoids, phenolic acids and quercetin which are responsible for hepatoprotective and antihemorrhoid activity [57]. Quercetin and kaempferol are the active constituents of *Aesculus hippocastanum* which is useful for constipation and haemorrhoids [58]. *Cinchona calisaya* and *Cinchona succirubra* contain quinine, quinidine, cinchonine, cinchonidine, quinic acid which is used to treat anorexia, bloating and other digestive problems [59]. *Erythrea centaurium* contain gentiopicroside used as gastroprotective [60]. *Salix alba* contain salicin used in many gastrointestinal disorders [61]. The active constituent of *Sambucus nigra* is anthocyanins which help to cure various gastrointestinal diseases [62]. *Melissa officinalis* contain quercitrin, rhamnocitrin, luteolin used for dyspepsia [63]. Lobelia contain Lobeline, Obelacrin, chelidonic acid used as gastroprotective [64]. *Gentiana lutea* contain secoiridoid which is a bitter tonic in gastrointestinal ailments for improving smooth function of the digestive system [65]. *Aloe capensis* contain Barbaloin, aloe-emodin which act as laxatives [66].

### 5.2 Possible target of action of plants in the Electrohomeopathy Vermifugo group in Gastrointestinal disorder.

*Allium sativum* contains Allicin which is used in indigestion [67]. Ascaridol is a chemical constituent of *Chenopodium anthelminthicum* which has potent antihelminth activity [68]. *Ruta graveolens* contain Rutin which has anti-inflammatory activity and is used in painful gastrointestinal irritation [69]. *Dictamnus albus* possesses quinoline alkaloids and limonoids

which are used for digestive tract disorders including cramps, stomach problems, and worms in the intestines [70]. *Thymus serpyllum* contains thymol and carvacol which have the antioxidative and antimicrobial properties [71]. *Imperatoria osthrotium* contain Caffeoylquinic acid which is used for the treatment of indigestion. It reduces the symptoms of intense pain, flatulence and intestinal gas [72]. *Artemisia cina* contains santonin which has anthelmintic activities [73]. *Spigelia anthelmia* contains anthraquinone which has potent anthelmintic activity[74].

## 6. DISCUSSION : Combining Herbal Substances in a Rational Background

As a general rule, the action of a single herb does not usually meet the requirements for the treatment of a complex condition, such as functional dyspepsia or irritable bowel syndrome. Typically, combinations of aromatic and bitter substances are used, often with components from other groups [75, 76]. The combination of herbal preparations is a typical feature because of multi-drug – multi-target effects. A combined herbal preparation can be better suited to the medicinal needs and pharmaceutical preconditions of use than a preparation from any one of the single plants [77–79]. The textbook of Rudolf Fritz Weiss, one of the foundations of rational phytotherapy in Germany, advises to combine herbal preparations. It attributes different roles to the blend partners, such as the classification as basic, adjuvant, aromatizing, and stabilizing constituents. Additionally, Weiss stressed the importance that all components of a combination have a similar direction of action as the basic component. This advice was originally directed to the composition of herbal teas, but was also used in combining herbal tinctures in a strategic manner. Electrohermopathy medicines are combinations of herbal substances in a rational manner. The different herbs in a specified group exhibit their property individually and are also combinable to give some synergistic effect. As per the treatment for Functional gastrointestinal disorder is concerned, the medicinal plants of Scrofoloso group and Vermifugo group possess are highly potential to treat almost all kinds of FGID. The phytoconstituents of medicinal plants used in above groups are highly effective and safe which has been already proved. [Table -3 &4]

**Table: 3. Chemical constituent of different plants used in Scrofoloso group.**

Name	Phytochemical constituents	pharmacological activity
<i>Cochlearia officinale</i>	Cochlearine and myrosin.	Gastroprotective
<i>Hydrastis canadensis</i>	Berberine, hydrastine, palmatine, canadine, hydrastinine	Gastrointestinal inflammatory disorders, gastroesophageal reflux disease
<i>Scrophularia nodosa</i>	Saponins, cardioactive glycosides, flavonoids, resin, sugar and organic acids	Spasmolytic Antihemorrhoid
<i>Smilax medica</i>	Steroidal Saponins	Antifungal activity
<i>Tussilago farefara</i>	Sesquiterpenes, phenolic acids, flavonoids, chromones, pyrrolizidine	Gastro and Respiratory protective

	alkaloids(Senecionine senkirkine,)	
<i>Veronica officinalis</i>	Verproside	Stomach and intestine disorder
<i>Matricaria chamomilla</i>	Sesquiterpenes, flavonoids, coumarins, and polyacetylenes	<b>Antispasmodic,</b> Gastrointestinal disorder, Hepatoprotective
<i>Nasturtium officinalis</i>	Alkaloids, flavonoids, saponins, terpenoids/steroids, protein, essential and volatile oils, glycosides, tannins, folic acid, vitamins	Hepatoprotective
<i>Strychnos nuxvomica</i>	Strychninine Brucine Isostrychnine Novacine	Dyspepsia
<i>Lycopodium clavatum</i>	Huperzine, lycopodine, lycoflexine, Alpha-onocerin and sporopollenin	Hepatoprotective activity
<i>Rheum officinale</i>	Anthraquinones	purgative/cathartic, stomachic
<i>Berberis vulgaris</i>	Berberine, berbamine	Choleretic, laxative, Antidiarrheal, anti-hepatitis
<i>Solidago virgaurea</i>	Terpenoids, saponins, phenolic acids, quercetin, kaempferol,	Hepatoprotective and Antihemorrhoid
<i>Aesculus hippocastanum</i>	Triterpenoids, saponins, flavonoids, coumarins, carotenoids	Constipation Antihemorrhoid
<i>Cinchona calisaya</i>	Quinine, quinidine, cinchonine, cinchonidine, quinic acid	Appetizer, bloating
<i>Cinchona succirubra</i>	Quinine, Quinidine Cinchonine, cinchonidine	Appetizer, bloating
<i>Erythraea centaurium</i>	Gentiopicroside	Gastro protective
<i>Salix alba</i>	salicin	Gastro protective
<i>Sambucus nigra</i>	Antioxidant status	Gastro protective
<i>Melissa officinalis</i>	Volatile compounds, triterpenoids, phenolic acids and flavonoids	Antispasmodic
<i>Lobelia inflata</i>	Lobeline, Obelacrin chelidonic acid	Gastro protective
<i>Gentiana lutea</i>	Secoiridoid	Bitter tonic in gastrointestinal ailments for improving the digestive system.

<i>Aloes capensis</i>	Barbaloin, aloe-emodin-9 anthrone, Isobarbaloin, Anthrone-C-glycosides	Laxatives
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**Table: 4. Chemical constituent of different plants used in Vermifugo group .**

Name	Name	Phytochemical constituents	pharmacological activity
1.	<i>Allium sativum</i>	Allicin	Indigestion
2.	<i>Chenopodium anthelminthicum</i>	Chenopodiaceae,	Anthelmintic
3.	<i>Ruta gaveloens</i>	Rutin	Anti-inflammatory Painful gastrointestinal irritation Anthelmintic
4.	<i>Dictamnus albus</i>	Quinoline alkaloids and limonoids	Digestive tract disorders including cramps, stomach problems, and worms in the intestines
5.	<i>Thymus serpyllum</i>	Thymol and carvacol	The antioxidative and antimicrobial properties
6.	<i>Imperatoria osthrotium</i>	Caffeoylquinic acid Phenolic acids Flavonoids Coumarins	Antioxidant and anti-inflammatory activities
7.	<i>Euphorobium officinalale</i>	Scopoletin, scoparone, isoscooletin, quercetin	Digestive disorder
8.	<i>Artimisia cina</i>	Terpenoid santonin	Anthelmintic activities
9.	<i>Spigelia anthelmia</i>	Alkaloids Saponin Flavonoid Tannin Phenolics Anthraquinone	Anthelmintic efficacy
10	<i>Tanacetum vulgare</i>	Phenolic acids, flavonoids, terpenoids and fatty acid	Antioxidant

## 7. CONCLUSION

Electrohomeo therapy has always been an important part in the treatment of gastrointestinal diseases, especially FGID. Medicinal plants can be composed according to their principal bioactive constituents and their target of action. Though medicinal plant extraction are always have its huge complexity, variability and interactions between bioactive compounds, the potential benefits from multiple plant extracted spagyrics derive pharmacological effects by synergistic interactions of many phytoconstituents. **This justify the use of combined herb is always better then the use of single one.** This is because the combining herbs can guide to optimize targeting of the therapeutic indication, and hence to better treatment. In conclusion, this review summarizes the current knowledge on the medicinal property and therapeutic action of medicinal plant constituents used in Electrohomeopathy and opens a discussion on their possible use in justified cases as an alternate equivalent substitute for synthetic preparations and other medical systems.

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#### **CONSENT**

It is not applicable.

#### **ETHICAL APPROVAL**

It is not applicable.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist

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