# Role of Unani Formulations in the Management of Gastric ulcer; Safoof-e-Asl-ul-soos and Arq Mako Morakkab-A case series

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Abstract: Peptic ulcer is the erosion in the gastric or duodenal mucosa. The word 'Peptic' derived from pepsin, a stomach enzyme that break downs proteins. Peptic ulcer located in the stomach is called gastric ulcer. It is the most prevalent gastrointestinal disorder seen in clinical practice which causes a high rate of morbidity and mortality. The 1-year prevalence based on physician diagnosis was 0.12-1.50% and that based on hospitalization data was 0.10-0.19%. The eminent Unani Physician Ibne Sina (980-1037 A.D.) explained that Gastric Ulcer (Qurha Medah) occur due to the damage of gastric mucosa which is caused by the irritant and corrosive humors (khilte haad) which penetrate and breach the continuity of gastric mucosa. So there is a variety of reasons which is related to altered life style pattern like use of high spicy diet, stress, smoking, excessive intake of tea and coffee, taking NSAIDs, drinking too much alcohol etc. All these factors aggravated the disease and damage the protective mechanism of gastric mucosa, the result is inflammation (gastritis) or an ulcer. Ulcer is curable with the combination of different kinds of medicine such as antibiotics, antacid, and  $H_2$  receptor blockers, proton pump inhibitors, etc. which are much expensive and need long term use and have prolong side effects also. Unani Medicine has its own way of successful management of Gastric ulcer, without any side effects. The fundamental principle in the treatment is to restore the normalcy of patients, correction of imbalance of mizaj and to restore the balance of humors in the body. Effective anti-ulcerative and antioxidant properties are found in Unani formulation of Asl-ul-soos (Gycyrrhiza glabra) and Mako (Solanum nigrum). Unani Formulations of these drugs decreases the high stomach acid levels, relieves heartburn, indigestion and prevents ulcer formation. The present article reports the properties and efficacies Safoof-e-Asl-ul-soos (Glycyrrhiza glabra) and Arq Mako Morakkab in gastric ulcer Patients.

Keywords: Unani Medicine, Peptic ulcer, Gastric ulcer (Qurha Medah), Unani drugs (Safoof-e-Asl-ul-soos, Arq Mako Morakkab)

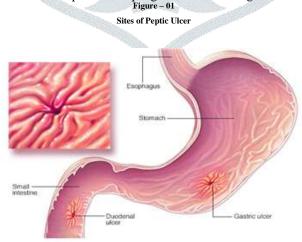
#### Introduction:

Peptic ulcer disease represents a serious medical problem. Approximately 500,000 new cases are reported each year, with 5 million people affected in the United States alone.<sup>1</sup> In 70 % of patients it occurs between the ages of 25 and 64 years.<sup>2</sup>

Peptic ulcer disease is a problem of the gastrointestinal tract characterized by mucosal damage secondary to pepsin and gastric acid secretion. It usually occurs in the stomach and proximal duodenum; less commonly, it occurs in the lower oesophagus, distal duodenum, or the jejunum.

**Peptic Ulcer defined as,** "A peptic ulcer is an excoriated area of stomach or intestinal mucosa caused principally by the digestive action of gastric juice or upper small intestinal secretions."<sup>3</sup>

A peptic ulcer in the stomach is called a gastric ulcer. A duodenal ulcer is a peptic ulcer that develops in the first part of the small intestine (duodenum). An oesophageal ulcer occurs in the lower part of oesophagusas shown in Figure 1.<sup>4</sup>



Peptic ulcers occur when the lining of these organs is eroded by the acidic digestive juices. A peptic ulcer differs from erosion because it extends deeper into the lining and incites more of an inflammatory reaction from the tissues that are involved, occasionally with scaring.<sup>5</sup>

*Ibne Sina* explained that Gastric Ulcer (*Qurha Medah*) occur due to the damage of gastric mucosa which is caused by the irritant and corrosive humours (khilte haad) which penetrate and breach the continuity of gastric mucosa.<sup>6</sup>

The annual global incidence rates of Peptic Ulcer were 0.10-0.19% for physician-diagnosed peptic ulcer disease and 0.03-0.17% when based on hospitalization data. The 1-year prevalence based on physician diagnosis was 0.12-1.50% and that based on hospitalization data was 0.10-0.19%.<sup>7</sup>

**Etiology:** In Unani Medicine, Unani scholars mentioned the following cause of gastric ulcer like, khilt-e-haad (irritant and corrosive humours), Motaffin nawazil (purulent matter), Motaffin fuzlat (waste materials), which accumulates in the stomach and get infected), Haar and tursh ashya (Hot and spicy food). Abnormal humours absorbed by stomach and produce irritation. Habitual sharp irritating, decomposable khilt is usually ulcerating in nature. *Other causes and factors are* infection of H. *pylori*, Long-term use of NSAIDs. Stress or eating food high in acid, Smoking, alcohol, life style disorders, spicy and junk foods. Emotional stress may alter factor that maintain mucosal integrity and thereby ulcer developed because of decrease mucosal defense.<sup>8</sup>

**Material and Methods:** The main symptom of gastric ulcer is upper abdominal pain, (dull, sharp, or burning or hunger-like feeling).<sup>9</sup> Bloating and excessive burping, vomiting, poor appetite, and nausea unexplained weight loss symptoms of peptic ulcer. Other associated symptoms may include: acid or heartburn, feeling satiated (full) when eating. In this case series 5 patients were enrolled. Diagnosis of Cases was confirmed with clinically and along with pre and post treatment, endoscopy measurements. After Diagnosis, Informed consent was taken from the patients.

In this case study Unani formulation of Safoof Asl-ul-soos (Glycerizaglabra) and Arq MakoMorakkab used. Constituents of Arq Mako Murrakab are Mako (Solanum nigrum), Kasni (Cichorium intybus), Baranjasaf (Artemesia vulgaris) and Badyan (Foeniculum vulgare). Patients were advised to take 25 ml Arq mako murrakab with 5 gm safoof asl ul soos twice a day and were instructed to take medicines in empty stomach daily for one month and also recommended to reduce their consumptions of tobacco, alcohol and spicy foods.

Case 1- A 30 year old female, came to the OPD with stomach pain, heartburn, bloating and nausea. Pain was mild & moderate. The treatment was started and after one month, patient reported complete relief.

**Case 2**- A 40 year old male, businessman, came with complaints of nausea, vomiting, sensation on epigastric region. After complete necessary investigations the treatment was started, and after one month of treatment the patient was found to be relieved.

**Case 3-** A 35 year old male, came to the OPD with complaints of severe heartburn, stomach pain and vomiting. He had a positive family history of gastric pain, then treatment was started and after one month, improvement in symptoms was observed.

**Case 4-** A 45 year old female, housewife came to the OPD with burning sensation in epigastric ulcer and nausea. There were no other significant complaints. Treatment was started and after one month of treatment patient found to be relieved.

Case 5- A 32 year old female, came to the OPD with stomach pain, nausea, vomiting, and heartburn. Treatment was started and after one month, patient found to be relieved.

**Result-** All the Patients was significantly relieved symptomatically such as burning sensation, pain in stomach, nausea vomiting, burping and healed ulcer revealed in endoscopy after one month of prescribed Unani Treatment. Findings of treatment and after treatment were graded by the use Likert's scale which is mention in Table -01

Case No	Epigastric burning sensation		Dull pain in the stomach Post		Nausea & Vomiting		Burping		Heartburn		Bloating		
	Pre	Post		Pre	Pre	e P	ost	Pre	Post	Pre	Post	Pr	e Post
1	2	0	1	0	3	0		1	0	2	0	2	0
2	2	0	1	0	1	0		1	0	2	0	1	0
3	3	1	2	0	1	0		2	0	3	0	1	0
4	1	0	2	1	2	0		1	0	1	0	2	0
5	3	0	3	1	3	0		2	0	1	0	0	0

## **DISCUSSION:**

In the Present time, numbers of Unani and modern medicines are used in the management of Gastric Ulcer. The aim of this study was to demonstrate the effect of Unani compound containing powder of "Glycyrrhizaglabra (Asl-ul-soos) and Arq of Solanum nigrum (Mako), Cichorium intybus (Kasni), Artemesia vulgaris (Baranjasaf), Foeniculam vulgare (Badyan) in the treatment of peptic ulcer diseases. *G. glabra* contain a number of flavonoids, alkaloids and many other chemical constituents *which have been used as* great antioxidant and antibacterial effect. Carbenoxolone isolated from rhizome was also found is to be quite effective in the management of peptic ulcer.<sup>8</sup> It also reduces stomach secretion, produces thick protective mucus for stomach lining which protect it from inflammation, gastritis and peptic ulceration.<sup>8</sup>

*Solanum nigrum* is an important ingredient in traditional Indian medicines. Infusions are used in dysentery, stomach complaints, and fever.<sup>11</sup>The juice of the plant is used on ulcers and other skin diseases.<sup>11</sup>and Mako kasni also have a best anti-inflammatory drugs in unani medicine use in inflammation (Iltihab) of visceral organs.

In our patients of Gastric Ulcer, we prescribed above mentioned Unani formulation daily for one month to evaluate its effect on Gastric Ulcer. Ulcer became healed after 1 month of treatment in these cases. The ideal aim of any therapy is to relief the symptomatically along with healed ulcer. This was achieved with this Unani formulation. Treatment with anta acid or PPi analogue in gastric ulcer need long term treatment and cost effective. While with our drug ulcer healed very rapidly (within one month) along with improvement in their symptoms.

Stomach pain was observed in all 5 patients, however after treatment no pain was found in 3 patients while severity of pain was found decreased in 2 patients. (Table-01)

2 out of 5 Patients also complaints of severe vomiting. Both the cases however reported complete relief after the treatment. (Table-01)

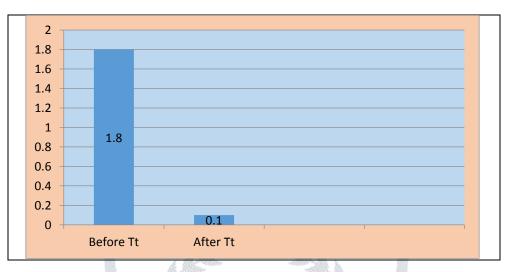
2 out of five patients complaints significant burping and bloating after one month treatment, no burping and bloating are found.

3 out of five Patients complaints severe heartburn; however after treatment severity of heartburn was found decreased.

		8			
N	/Iean±S.D	Mean Difference	t value	P value	
Before Tt	1.8±0.8	1.7	12.04	< 0.0001	
After Tt	0.1±0.3				

Table-02 Showing effect of Unani formulations

Graph: 02 Showing Mean Value of Before & after Treatment



Mean difference & standard deviation in the findings recorded before and after treatment was found to be 1.7, with t value 12.04, indicating highly significant as shown in table-02.

#### **Conclusion-**

After findings and discussion the conclusion is that, that unani formulation of Asl-ul-Soos (*Glycirizaglabra*) and Arq Mako morakkab have a significant effect on the management of Gastric ulcer without any apparent minor or major side effects, usool-e-ilaj of gastric ulcer is also appropriates and quite effective.

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