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CONCEPT OF PEPTIC ULCER IN UNANI MEDICINE: A COMPREHENSIVE APPRAISAL

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ABSTRACT

Peptic ulcer disease remains a common health problem, despite all the progress made in the diagnosis and treatment, both medical and surgical, of this condition. The incidence of gastroduodenal ulcer disease is approximately 1 to 2 per 1000 inhabitants per year. Two thirds of patients with ulcers are male. The predominant age at which duodenal ulcers occur is between 20 and 50 years, whereas gastric ulcers most commonly occur in patients more than 40 years old. The risk of recurrent disease after initial healing is high; more than 50% of patients have a recurrent ulcer within 12 months of healing in the absence of treatment. Maintenance acid suppressive therapy reduces this recurrence rate, but only therapeutic measures that remove the underlying cause of the ulcer are able to prevent nearly all ulcer recurrences. Ancient eminent physicians of Unani system like Ibne Sina, Razi, Abul Mansoor Qumri and Ibn Hubl Baghdadi have described extensively about GIT ulcers and its causes, clinical features, treatments and its consequences in their treatises. GIT ulcers are described according to the organ affected by ulcer namely Oesophageal Ulcer as *Qarahe Mari*, Stomach Ulcer as *Qarahe Medi* and Duodenal Ulcer as *Qarahe Mevi*. Later on the term "*Qarahe Hazmia*" coined for peptic Ulcer by Unani Scholars. There are various single drugs as well as compound formulations mentioned in the manuscripts of renowned physicians for the treatment of GIT ulcer. The drugs possessing major properties of *Munaqqi*(cleansing), *Mudammil* (healing) and *Mumbit Lahm*(tissue forming). Keeping these facts in consideration, a systematic literary survey on this topic form renowned ancient text of Unani Medicine was carried out.

KEYWORDS: GIT ulcer; Peptic ulcer; Qarahe Hazmia; Unani Medicine.

HISTORICAL BACKGROUND

Peptic ulcer was well known in antiquity. It is not clear when the medical history of peptic ulcer was first written, possibly with the Egyptians, or with Hippocrates [460 BC, or (Diocles of Carystos 4th century BC)]. One of the earliest descriptions is carved on a pillar of the temple of Aesculapius at Epidaurus (4th century BC) where what might be considered the first surgery for a gastric ulcer was described by Goldstein "A man with an ulcer in his stomach was tied to the doorknocker and incised his stomach. Asklepios opened his stomach, cut out the ulcer, sewed him up again, and loosed his bonds.[1]

Gastric ulceration as such is first mentioned by Celsus, in his ' de Medecina' (A.D. 30). Dealing with the rules governing diet for the preservation of health, he wrote,' but if ulceration attacks the stomach, milk and glutinous food are given, but not to satiety; all acrid and acid things are withheld. It is tempting to believe that this fundamentally sound counsel was based upon actual observation of cases of gastric ulcer occurring in the upper strata of Roman society. Indigestion and heartburn have been described for thousands of years, but it was only in the 16th century that the disease peptic ulcer was established by autopsy. One of the first autopsies - proven pyloric peptic ulcers was studied in 1586 by Donatus of Mantua. Bauhin, in 1679, concluded that inflammation of the stomach led to a gastric ulcer which then ruptured. The first known gastric hemorrhage was reported in 1704. First classification of stomach diseases came in 1793 from Matthew Baillie, with clear descriptions of acute inflammation, ulcer, perforation, pyloric stenosis, and ulcerated cancer. In 1817, patients with perforated gastric ulcer were reported in Dublin by Crampton and patients with perforated duodenal ulcer were reported in London by Travers, who also noted bleeding, stenosis and penetrating gastric ulcers.[1,2]

Although ulcers have long been known to medical science, ulcer disease only became a popular diagnosis in the late 19th century. This change in frequency of diagnosis can reflect a change in incidence or a change in diagnosis (i.e., the symptoms of ulcer were previously attributed to some other process). Alternatively, the prevalence or virulence of H. pylori might have changed

such that new disease patterns emerged. There are examples of populations where H. pylori are rare, such as ethnic Malays in whom peptic ulcer and gastric cancer were long recognized to be rare. While, it is possible that H. pylori was either largely absent from Western countries or became widespread or more virulent in the 18th and 19th centuries. The first definite peptic ulcer in a human was described in the 20th century was from the autopsy of a mummy of a man from the Western Han dynasty who died in 167 BC. The autopsy showed a clearly visible perforated prepyloric ulcer resulting in acute diffuse peritonitis complicated by disseminated coagulopathy.[1]

In 1st century AD, Jalinoos mentioned about *quroohe medah*; cause, symptoms and its specific site. Rabban Tabri (770AD) enumerated the cause, symptoms and treatment of *quroohe medah*. Later on eminent scholars of Tibb like Razi (850AD), Ibn Sina (980AD), Majusi (994 AD), Zahravi (1013AD) and Azam Khan (1813AD) also put forward the detail descriptions on GIT ulcer.[3-7]

INTRODUCTION

Peptic ulcer disease is a chronic condition with spontaneous relapses and remissions lasting for decades, if not for life. The term 'peptic ulcer' refers to an ulcer in the lower oesophagus, stomach or duodenum. Ulcers in the stomach or duodenum may be acute or chronic; both penetrate the muscularis mucosae but the acute ulcer shows no evidence of fibrosis. Gastric and duodenal ulcers coexist in 10% of patients and more than one peptic ulcer is found in 10–15% of patients.[8] Peptic ulcer is a common disease in South India where the staple diet contains rice and less common in states where the staple diet is wheat. Duodenal ulcer is more common than gastric ulcer; about 75 to 80% of the peptic ulcers are found in the duodenum.

Peptic ulceration is strongly associated with H. pylori infection. Around 90% of duodenal ulcer patients and 70% of gastric ulcer patients are infected with H. pylori. The remaining 30% of gastric ulcers are caused by NSAIDs.[8] Cigarette smoking is a risk factor for peptic ulcer disease and its complications. Coffee, tea and colas are potent acid secretagogues.[8] Burning epigastric pain exacerbated by fasting and improved with meals is a symptom complex associated with peptic ulcer disease (PUD). The most common presentation is with recurrent abdominal pain which has three notable characteristics: localisation to the epigastrium, relationship to food and episodic occurrence.[8] In uncomplicated peptic ulcer the only sign will be tenderness in the epigastrium or slightly to the right of the midline in the upper abdomen. Perforation is the commonest complication of peptic ulcers followed by hemorrhage and pyloric stenosis.[9]

Unani concept of peptic ulcer *(Qarhe Hazmiya)*

Qarhe Hazmiya is a Unani medical terminology coined and used as synonym for peptic ulcer. *Qarhe Hazmiya* is described under the entities of *Qarhe Mari* (ulcer of oesophagus), Qarhe *Medi* (gasric ulcer) and *Qarhe Mevi* (intestinal ulcer) in different classical text of Unani Medicine along with their management and prevention.[29][6] The term *Qarha* derived from Arabic word which means an ulcer or injury. Further a breach / break or loss of continuity in muscle or in similar organ is defined as *jarahat* (wound).[3,10] Further Loss of continuity / break or breach in skin or memnbrane is known as *kharash* or *sahaj* (erosion). In Unani Medicine an ulcer is defined when there is any type of discontinuity spreading over an organ or especially in a muscular organ associated with pus formation.[4]

There are four natural types of *medah* (stomach) accordingly, *Haar, Barid, Yabis* and *Ratab*. Diagnosis of disease is made by comparing the original and altered *mizaj* in Unani system. Original *mizaj* of *medah* is hot and moist as it is a muscular organ.[11]

Characteristics of *haar taba-i medah* (stomach):

- Good digestion of heavy diets such as beef and goose etc.
- Soft and light diet such as young chicken, milk etc. are get spoiled due to over digestion.
- Favorable for heat producing food.
- Digestion overwhelms appetite.

Characteristics of *barid taba-i medah* (Stomach):

- Appetite is not impaired.
- Impaired digestion comparing to *Haar taba-i* Stomach
- Light and soft diets will get digested properly.
- Favorable for cold producing foods.

Characteristics of *yabis taba-i medah* (stomach):

- Mild thirst quenched by intake of little liquid.
- Additional intake of liquid will easily leads to fullness and borborygmi.
- Favorable for dryness producing foods.

Characteristics features of *ratab taba-i medah* (stomach):

- Thirst is reduced with tolerance to oil and fat consumption.
- Additional liquid will not easily produce fullness.
- Hence there is no overflow.
- Favorable for moist producing foods.[4]

Aetiopathogenesis

Disease is not a localized phenomenon, but a disturbance in the equilibrium of *akhlat arba* to be maintained in the state of health. The disturbance is known as *sue mizaj*.

The aetilogical classification of any disease are of three types:

- *Sue mizaj sada* and *maddi* (intemperemental)
- *Sue tarkeeb* (disturbed structure)
- *Tafarruqe ittesal* (loss of continuity).[12]

The cause of ulcer is loss of continuity (*tafarruqe ittesal*) in general either external / internal. Causes of internal wound/ulcer are; corrosive, caustic, moistening and relaxing humours or humours with drying and clieving

action, gases cuasing distension or penetrating gases, repletion of humours causing distension.[4,13]

According to classical Unani text, accumulation of abnormal superfluous *akhlat* and the *ghair taba-i barid* and *ratab* (cold and moist) morbid condition alter the functions of the stomach. Further this accumulation of *morbid akhlat* in turn will lead to *sue mizaj*, *sue tarkeeb* and *tafarruqe ittesal* in the *ghisha-e mukhati wa jirme meda and ama* (mucus membrane and muscular wall of stomach and Intestine).[4,13]

Causative factors of peptic ulcer

- *Khilte haad laze* produced in stomach itself or descends / dribbles from other organ; brain (*khilte balgham*), liver (*bile*), spleen (*black bile*). Excess of bile poured into stomach at the time of severe pain, anxiety, depression and due to delayed emptying of atomach.[3]
- Ingestion of acids (*turshi*) and spicy (*tez*) like vinegar (*sirka*) and mustered lead to formation of pustules and ulcers of stomach.[14]
- As a consequence of inflammation (*warme medi*).[3]

Infiltration (*tashar'rub*) and enduring of the hot and concentrated humour (*haad wa tez khilt*) in stomach muscle wall leads to ulcers and pustules formation. Dribbling of humour over the stomach takes place from other organ. Gastric ulcer in particular is caused by the constantly dribbling of morbid fluid (*nazlavi rutubat)* from the brain (*dimagh)*, which is irritant (*laze*) or corrosive in nature.[13,15]

Ulcer develops due to infiltration of *khilte had* (irritant and corrosive houmours) in stomach. These *akhlat* dribbles or descends from the brain in the form of *nazla*. Thick *khilth* are more prone to putrefaction.
Insebabe nazlavi rutubat (descends or dribbling from brain), *Insebabe safra* (poured from liver e.g. bile), *Insebabe sauda* (poured from spleen- black bile).[4]

***Alamat wa Nishaniyan* (clinical features)**
Symptoms of gastric ulcers are mainly of 4 types:

1. Bad smell from the mouth and belching
2. Dryness of the palate and tongue
3. Frequent vomiting, and
4. Ulcer debris is expelled along with the vomitus.[15]

If ulcer is present in oesophagus pain will be felt between the shoulders at the back and neck. Ulcer is in the cardiac region gives rise to pain in the lower chest and epigastric region. If the food is in the stomach pain will be felt more in the *miraq* (diaphragm), if the ulcer is in the greater curvature of the stomach pain increases after taking food, and is felt near the umbilical region.[13]

In *Qarhe Medi*, there is severe pain in the stomach during eating food which gets aggravated by intake of salty, acidic, spicy and cold food. Pain in stomach is always associated with sour or bad smelled belching, nausea with burning (*Sozish*). There can be loss of appetite, nausea, vomiting of blood, short pulse (*nabze sagheer*), sense of heaviness and congestion while eating and mild difficulty in passing stools (constipation). Pain is felt at following site; between shoulders, retrosteranl area and above umbilicus. Pain is aggravated by ingestion of acidic and sour food (*hareef* and *hamiz*).[16] There can be haemetemesis, malena and, haemaetochazia (blood in vomitus and pus in stool).[4]

Razi has enumerated two symptoms of gastric ulcer. First symptom is severe pain during ingestion of food and second one is frequent haematemesis and further he described that salty, spicy, sour, hot and cold stuffs are not only causes discomfort but also aggravate the ulcer.[3]

Stomach ulcers specifically ulcers at the greater curvature (*Qa'ere medah*) will cause shortness of breath (*Tange'e tanaffus*), syncope (*Ghashi*), coldness of extremities, and indigestion, and also cause less production of blood and *rooh*, which leads to the development of above complications.[14]

Tashkheeshe Fariqa (Differential diagnosis) of Qarhe Mari, Medi wa Mevi
Ulcers can appear at oesophagus *(mari*), cardiac end (*fam'me medah*), pyloric antrum / greater curvature of the stomach *(Qa'ere medah)*, and intestines (*ama'a*).

Differentiating site of the ulcers according to symptoms:
Qarhe Mari (ulcers of the oesophagus)

Pain will be felt between the shoulders at the back. Pain is felt in the neck while food passes through it and disappears after passing food. To observe and confirm this condition, some mustard added to patient's food.[3,4,6,10,16]

Qarhe Medi (ulcers of the stomach)
Pain increases while passing food from the stomach and pain is felt near the navel. When ulcers is in the lower part of the stomach, there will be shallow breathing (s*ighre nafas*), dryness of tongue, fullness of vessels, unconsciousness, cold extremities, foul smell belching and excessive vomiting with debris.[3]

Qarhe Mevi (ulcers of the intestine)
Pain increases while dribble of food (*inhedare ghiza*) and felt below the navel.
Debris from the ulcer will come out with faeces.[4, 9]

***Usoole Ilaj* (Principles of treatment)**

1. Removal of causative factors and causes (*Izala-e sabab*)
2. Coction and elimination or excretion of morbid matter (*Nuzj wa isthifragh*)

3. Removal of causes that results in drabbing of morbid matter and pouring into stomach followed by elimination or evacuation.
4. Use of astringent action (*qabizat*) drug to heal fresh ulcer
5. Use of *munaqqi fuzlat* followed *by jazib wa mujaffif rutubaat, jali followed by mdammile qurooh and mumbite laham drugs.*
6. Regiminal therapy: *Fasd* - If condition is favorable and not contraindicated, when ulcer *(Qarha)* is fresh and prior to suppuration and specially there is a predominance of blood.[4,14,15]
7. *Nuzj wa tanqia and tadeel* in case of *insebab-e mawad*.[14,17]

Treatment according to type of ulcer[4,15]

Fresh / unsloughed ulcer

Qabizat advia: rub ghafis, rub afsantheen, [9] *gulnar, mazu, aqaqia, samghe arbi, tabasheer biryan, zarishk, kateera*.[4,5]

Luabe asphagol, luab behedana, luaab tukhme alsi, luaab tukem kanucha. Intake of easily digestible food. Strong cleansers drugs (*Munaqqi*) are contra indicated since they themselves may prove to be ulcerogenic and can aggravate the existing condition.[15]

Qarhe Mari wa Fame Medi

Damul akhwain, kundur, kahruba, gile Armani each 2gm sufoof with sharbat e khashkhash. Thabaseer and Tukhme zarisk, Sikanjabeen sada, arqe gulab, arqe kasni and arq mako 50gm each Tanqia: Khiyar shambar 70gm, gulkand 40gm with gulab and roghane gul[5]

Gastric Ulcer (Qarhe Medi)

Qarhe Qadeem (Old ulcer) with sloughed: *Jali wa munaqqi advia* – if pus is discharging, ulcer is cleaned with *Maul Asal* (aqueous solution of honey) and *Julab* (compound of honey and *arq gulab*) are recommended. Egg yolk is mixed with *rohane gu*l and applied over stomach.[18]

Tanqia should be followed by *mudammile qurooh* and *mumbite laham advia;* such as use of *qurse kahruba* and *qurs gulnar* 1 each with 20gm *sharbat khashkhash* and *arqe mako.*

Damul akwain, kundur each 15gm, gulnar, kahruba, gule surkh each 70gm powder all with *rube behi* To reduce the thirst and for cooling action: *Arqe makko, Arqe badiyan, arqe gauzaban.*

*Dammul akhwain, gile Armani, gulanr 1*gm, fine powder each mixed with 20gm of *sharbat anjabar* to take as linctus.

Strong cleansers drugs are not to be given *(Qavi munaqiyath* se *parheez)*

Intestinal Ulcer (Qarhe Mevi)

Sufoof teen with kahruba.

Thukhme khubbazi, Thukhme khatmi, nashashta briyan, samghe arbi, gille armani, with sharbate aas.

Gile Armani, aqaqiya, rasoot.[7]

In case of constipation

Gule surk, gule banafsa each 10grm with *qand safed 20gm.* 6-9gm of powder at night.

Khayar shambar 70gm, *turnajabeen* 90gm, *gulqand asli* 40gm, *roghane badam, rohane gul* with *maul asl*.[5]

In Haemetemesis (*Qaiuddam*)

Rububе Qabizat: Rube afsantheen, Khamira jaw, Habbe rumman, khamira zabeeb[4]

In case of diarrhea and vomiting

Qqabiz, mugharri and mughalliz drugs: *Gulnar, mazu, aqaqia, samaghe arbi, gile armani, tabasheer biryan, sumaq, zarishk, aspagol biryan*[5]

Rububе qabizat: *rub ghafis, rub afsantheen*[4]

Gille makhtoom with *aabe bartang Qurse tabsheer qabiz, qurse gulnar, qurse afiyoon*[4,5]

Prognosis

Qarhe Medi (GU) and *akkale meda* are treatable conditions. Mean while smaller penetration and perforation are also possible to treat but larger perforation is not treatable and leads to death.[9] If the vomitus contains pus, it cannot be treatable and this patient rarely escapes death.[3]

***Mufrad dawa*[7,16,17]**

- Katera: musakkine shozish, qate nafsuddam, habisuddam, mudammile qurooh, mugharri and mulattif.
- Samge arabi: mujaffif, Qabiz
- Sandal safed: muqavvi meda
- Khisneeze khusk: habissudam
- Nashasta gandum: habisuddam, mane nazla
- Aabe bartang: jiryanuddam, habisuddam
- Kahruba: habisuddam wa qabiz, muqavvie meda wa ama
- Kundur: munaqqie rutubaat, mudammile qurooh, dafe tafun, munaffise balgham
- Dammul akhwain: jiryanuddam, qabiz, habisuddam'

Ghiza wa Parhez (*Diet and prevention*)

Taqlile ghiza (reduce food intake)

Sariul hazam Ghizaen (intake of quickly digestible food)

Liquid and thin diet like *aabe anar, aab santra* (orange juice), egg albumin, *aashe jaw, sagudana* and milk.[18] *Sharbate nilofer* with *aashe jaw*[5]

Diets which are free from constipation (*qabziyat*) and hotness (*hiddat*) of bile, such as branches of *Aleeq*, *Sambhalu* will be beneficial for enfeeble stomach.[3]

Following *tanqia*, it is a must to give buttermilk, juices of *safarjal*, and *rumman* etc.

For *tabreed / tadele mizaj*: *Sherae kasni, sherae Khiyareen, sherae e khurfa, each* 9 gm with *luab bihdana, gulab, sharbathe nilofer and aspagol*. *Sharbate sandal*, 20ml, *arq baidmushk* and *gulab* each 50 ml with 7 gm *tukhme rehan*.[5]

Murakkabat (Compound preparation)
Qurse gulanr: Gulnar, Gile armani, Samaghe arbi, Gule surkh, Aqaqia, Kateera, Aabe gulnar.[18,19]

Qurse kahruba: Kahruba, Tukme khurfa, kafoor hindi, kateera, smaghe arbi, kishneez khusk, khashkhas safed, nashasta gandum and aabe bartang.[15,19]

Ayarij Faiqra: Sibr, Mastagi, Oode balsan, Darchini, Saleekha, Asarun, Habbe balsan and Sumbuluttib'[4,17,19]

CONCLUSION

PUD disorder is the major health problem in both developed and developing countries. There are number of modern medicine available for this condition but adverse effects and high cost are the major limitations for the use of these drugs. At this point in time, Unani system of medicine is quite feasible mode of treatment option to cure this condition. Hence Unani system of medicine has its unique way of treatment provided the prescribed diet regimen is followed along with correct use of single and compound preparation.

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