

Unani interventions in the Management of Acute Necrotizing Pancreatitis (*Waram-i-Bānqarās Nakhri Hād*): A Case Report

Mohammad Shamim Khan*

Government Unani Dispensary, Kota North, Directorate Unani Medical Department, Rajasthan, India

ABSTRACT

Necrotizing pancreatitis is a serious and life-threatening complication of acute pancreatitis known as *Waram-i-Bānqarās Hād* in Unani medicine, which results from premature activation of zymogen granules, most commonly caused by alcohol and gall stones. Its diagnosis is based on clinical, pathological, and radiological findings. According to the Unani concept, it usually can be treated by adopting a regimen of *Waram-i-Hār* (acute inflammation) and *Fasād-i-Dam wa Ufūnat* (blood impurities & sepsis). The present paper deals with a case study of a 44-year-old married male patient suffering from alcohol-induced acute necrotizing pancreatitis treated with Unani formulation; *Naqū'-i-Shahatra*, *Arq Mako*, *Arq Kasni*, *Arq Badyan*, and *Jigrol* as oral administration, by applying an interdisciplinary therapeutic approach with the aim to evaluate the efficacy of the drugs clinically, pathologically, and radiologically. Patients have shown excellent and admirable results in clinical characteristics and pathological reports, and finally acute necrotizing pancreatitis has completely resolved, and the pancreas was found normal in size and echotexture just after four and a half months of treatment as confirmed by ultrasonography. The drugs were found to be safe and highly effective.

Keywords: Acute Necrotizing Pancreatitis, *Waram-i-Bānqarās Nakhri Hād*, Unani Medicine, interdisciplinary therapy, *Naqū'-i-Shahatra*

INTRODUCTION

Necrotizing pancreatitis is a serious and life-threatening complication of acute pancreatitis known as *Waram-i-Bānqarās Hād* in Unani medicine, which is characterized by an acute inflammatory condition of the pancreas.[1] Pathophysiologically, acute pancreatitis occurs as a consequence of premature activation of zymogen granules, releasing proteases that digest the pancreas and surrounding tissue.[1] In about 80% of all cases, acute pancreatitis is mild and self-limiting with a mortality of less than 5%, but in 20% of the patients, however, it is severe, with local complications such as necrosis, pseudocyst, or abscess, and systemic complications leading to multi-organ failure, associated with 98% of mortality.[1] If less than 30% of the pancreas is necrotic, the morbidity prevailed at 40%, but mortality, infection, and organ failure rates have been reported at 20%. If more than 50% of the pancreas is necrotic, the rate of morbidity rises to 100%, mortality to 40%, infection to 50%, the need for debridement to 70%, and multi-organ dysfunction to 65%. Gall stones and alcohol are

the most common causes of acute necrotizing pancreatitis. [2] Although the pancreas and its pathology have not been mentioned in any classic literature of Unani medicine, similar illnesses to acute pancreatitis can be explained under *Waram-i-Hār* (acute inflammation), *Waram-i-Falghamūni* (sanguineous inflammation), *Ḥummā 'Ufūniyyah* (infective fever), and *Ḥummā Waramiyyah* (inflammatory fever) described by Ali Ibn Al-Abbās Majūsi (930-994 AD) and Al-Sheikh al-Ra'is Abū 'Alī al-Ḥusayn ibn 'Abd Allāh ibn Al-Hasan ibn Ali ibn Sīnā (Bu Alī Sīnā) (980-1037 AD) in his famous book, *Kamil al-Sana'ah al-Tibbiyyah* (The Complete Art of Medicine), and *Al-Qānūn fī al-ṭibb* (The Canon of Medicine), respectively. [3,4] *Waram-i-Bānqarās Nakhri Hād* (acute necrotizing pancreatitis) usually can be treated by adopting a regimen of *Waram-i-Hār* (acute inflammation) and *Fasād-i-Dam wa Ufūnat* (blood impurities & sepsis). The principles of treatment for *Waram-i-Hār* (acute inflammation) are to abolish the causes (*Asbāb*), reduce congestion (*Imtilā'*), and provide rest (*Sukūn*) to the inflamed

Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

organ, and these can be achieved by utilizing Unani drugs that have multiple spectrum of actions including Muhallil-e-Waram (anti-inflammatory), Musakkin-i-Alam (analgesic), Mudirr-i-Bawl (diuretic), Mufattiḥ-i-Sudud (deobstruents), and Dafey-i-Safra (antibilious) in this patient.[5] Fasād-i-Dam wa Ufūnat (blood impurities & sepsis) can basically be managed by various modes of care: Taṣfiyyah wa Ta’dīl-i-Dam (blood purification and moderation), Talyīn wa Ishāl (laxation and purgation), Ta’rīq wa Idrār (diaphoresis and diuresis), Daf’-i-Ta’affun (removal of putrefaction), and Iṣlāḥ-i-Haḍm (to improve digestion), and these can be accomplished by employing Unani drugs that have Muṣaffī-i-Dam (blood purifier), Dāfi’-i-Ta’affun (anti-infective), Dāfi’-i-Jarāseem (antibacterial), Mudammil (vulnerary), Hāḍim (digestive), Kāsir-i-Riyāḥ (carminative) Muḥāfiz-i-Jigar (hepatoprotective), Muḥāfiz-i-Kulyah (nephroprotective), and immune enhancer properties.[6]

MATERIALS AND METHODS

Case Presentations

A 44-year-old married male patient suffering from alcohol-induced acute necrotizing pancreatitis visited the Government Unani Dispensary, North Kota, Rajasthan, India, for treatment on 28 April 2024 with the chief clinical features of recurrent fever, abdominal pain, abdominal distension, nausea, vomiting, and loss of appetite for the last 10 weeks. When queried about the background of his current ailment, he replied that he was quite well prior to 9 February 2024. After intake of heavy alcohol, suddenly he felt severe abdominal pain, abdominal distension, nausea, and vomiting. With these complaints, he was admitted to Maharaja Bheem Singh (MBS) Hospital, Kota, Rajasthan, on 9 February 2024. Here diagnosed as acute pancreatitis and treated till 20 February 2024 but with no relief. Eventually he shifted to Jeevan Rekha Super Specialty Hospital Jaipur with manifestations of high-grade fever, dyspnea, severe abdominal pain, nausea, and vomiting. Here acute necrotizing pancreatitis

(ANP), ascites, and bilateral pleural effusions were diagnosed and treated by a gastroenterologist pulmonologist. Pleural effusions and ascites were resolved, but acute necrotizing pancreatitis persisted. Percutaneous catheter drainage (PCD) was placed for peripancreatic collections on 23 February 2024. The patient was discharged with advised medications on 4 March 2024. The patient was readmitted to that hospital with complaints of abdominal pain, nausea, vomiting, fever, and loss of appetite under his consultant on 11 April 2024 and treated here till his condition stabilized, then he was discharged on 17 April 2024, continuing treatment of ANP. The patient was again admitted to that hospital with complaints of abdominal pain, nausea, vomiting, fever, loss of appetite, and deterioration in kidney function on 23 April 2024 and treated here till his condition stabilized. He was discharged on 25 April 2024 with advised medication of ANP. Physical examination of the patient was expressed as he was extremely weak and bedridden. His body weight was dropping 27 kg from 74 kg to 47 kg. He had a percutaneous catheter drainage (PCD) inserted for peripancreatic collections, draining foul-smelling, thick pus of approx. 50-60 cc/day. He was on a liquid diet. Pallor was found positive. On examination of vital signs, the patient’s body temperature was 98.6° Fahrenheit, pulse rate was 110 beats per minute, blood pressure was 120/80 millimeters of mercury, and respiratory rate was 20 per minute. On systemic examination of the central nervous system, the patient was conscious and oriented; of the cardiovascular system, the first and second heart sounds were normal; of the respiratory system, the bilateral chest was clear; and of the digestive system, the tenderness was present in the upper abdomen region. The pathological investigations of blood were expressive that hemoglobin (Hb) was lowered, random blood sugar was normal, serum creatinine was raised, total leucocyte count was higher, and neutrophils were also higher, as shown in Table 1. Hepatitis B surface antigen (HBsAg) was found negative.

Table 1: Pathology Reports

Haematology	Results				Units	Biological Reference Interval
	Base line	Follow-up				
	28 April 2024	04 May 2024	1 June 2024	29 June 2024		
Hemoglobin	8.2	9.2	9.2	11.6	g/dl	11.5 – 17.0
Haematocrit	23.4	28.2	27.5	34.1	%	37 – 54

R. B. C. count	2.79	3.08	2.88	3.50	mill./ mm ³	3.8 – 6.5
MCV	83.8	91.4	95.0	97.4	fL	80 – 100
MCH	29.3	29.8	32.0	33.2	pg	27 – 32
MCHC	35.0	32.6	33.7	34.1	g/dl	32 – 36
TLC	12.82	8.68	8.95	9.06	th. / mm ³	4.0 – 10.0
Neutrophils	79.9	75	80.2	70	%	50 – 70
Lymphocyte	11.8	20	15.1	25	%	20 - 40
Monocytes	7.0	2	3.4	3	%	0 – 10
Eosinophils	1.2	3	0.7	2	%	0 – 5
Basophils	0.1	0	0.6	0	%	0 – 2
Platelets count	504	561	382	475	th. / mm ³	150 - 500
Biochemistry of blood						
Serum Creatinine	1.6	0.89	-	0.94	mg / dl	0.5 – 1.3
Blood Urea Nitrog.	10.0	15	-	13.8	mg / dl	05 – 25
Potassium	4.62	3.82	-	4.25	mmol / L	3.4 – 5.0
Sodium	130.0	133.2	-	136.2	mmol/ L	135 – 145
Blood Sugar Random	130.2	113		242.7	mg / dl	< 140

RBC = Red Blood Cell, MCV = Mean Corpuscular Volume, MCH = Mean Corpuscular Hemoglobin, MCHC = Mean Corpuscular Hemoglobin Concentration, TLC = Total Leucocyte Count, g = gram, dl = deciliter, % = percent, mill.= million, mm³ = cubic millimeter or microliter, fL = femtoliter, pg =

picograms, th. = thousands, mg = milligram, mmol = millimole, L = liter.

The magnetic resonance cholangiopancreatography (MRCP) screenings were suggestive of necrotizing pancreatitis sequelae with intra- and extra-pancreatic walled-off collections and peripancreatic fat necrosis.

The detailed findings were shown in Table 2.

Table 2: Radiology Reports

Follow-up	Scanning	Findings
Base-line 12.04. 2024	Magnetic resonance cholangio-pancreato-graphy	The pancreas appeared bulky with heterogeneous signal intensity. A fairly large, poorly marginated, intra-extra pancreatic heterogeneous collection (8.2×4.5×4.5 cm, volume was 90 – 110 cc) was seen in the body and tail of the pancreas extending into the gastro-hepatic, gastro-splenic, lesser sac, and left paracolic gutter with internal areas of signal void – likely intra-collection air foci. A few small discrete collection pockets were seen in the gastro-hepatic space. There was marked surrounding retroperitoneal and mesenteric fat nodularity. The tip of the drainage catheter was seen in situ. Another smaller collection, measuring approx. 20 -30 cc, was seen in the pancreatic uncinata/root of the mesentery. There was marked peripancreatic fat inflammation and nodularity. There was edematous thickening of the posterior gastric wall. Marked circumferential diffuse edematous mural thickening was seen in distal transverse and proximal descending with partial luminal narrowing. No obvious bowel obstruction was seen. There was marked attenuation of the portal vein and SMV at the porto-splenic confluence. Splenic vein flow void was not visualized. Multiple tortuous peripancreatic collaterals were seen. Multiple subcentimetric-sized retroperitoneal lymph nodes were seen.
Post-treatment of 7 days (04.05.2024)	Ultrasono-graphy	Heterogeneous in echotexture (pancreatitis) with ill-defined heteroechoic collection (measured at least 6×4 cm) in the pancreatic tail region extending up to the splenic hilum.
Post-treatment of one month (01.06.2024)	Ultrasono-graphy	Visualized pancreatic head and body appearing normal in bulk. Tail was atrophied. Peripancreatic fat appeared markedly heterogeneous and nodular with marked retroperitoneal fat heterogeneity in the surrounding pancreatic tail and splenic hilar region with dirty appearance likely phlegm. A thin

		streak of free fluid was seen. No significant liquefied content was seen in the region.
Post-treatment of four and half months (07.09.2024)	Ultrasonography	Normal

Assessment Criteria

The therapeutic efficacy of the Unani formulations was assessed on the basis of the clinical and radiological examinations as well as hematology and biochemistry of blood.

Informed Consent

Written consent was taken from the patient before beginning Unani treatment.

Therapeutic intervention

The patient was advised to take fat-free diets and continue allopathic care along with Unani treatment comprised of "Naqū'-i-Shahatra," 35 grams soaked in 100 ml of warm water overnight, strained, and consumed on an empty stomach in the form of infusion (Naqū') in the morning and similarly in the evening; "Arq Mako" 50 ml and "Arq Kasni" 50 ml on an empty stomach twice daily; and "Arq Badyan" 50 ml and Jigrol 2 tablets after meals twice daily with normal water as oral administrations.

Naqū'-i-Shahatra is a self-formulated polyherb obtained from Moalajat Sharah Asbaab (Tarjama-e-Kabeer). 2nd volume, and purchased from Attar (herbalist) by the patient.^[6] Arq Mako, Arq Kasni, and Arq Badyan are pharmacopeal drugs, prepared according to the Essential Drugs List and Bayaz-e-Kabeer volume-2, while the Jigrol Tablet is a proprietary drug. These drugs are manufactured and marketed by GMP-certified Company Hamdard Laboratories (India).^[7-9] Naqū'-i-Shahatra was used regularly for 2 months, and the rest of the medicines were used for four and a half consecutive months.

Ingredients of Unani Formulations

Ingredients of Naqū'-i-Shahatra (crude herbs), Arq Mako (distillate), Arq Kasni (distillate), Arq Badyan (distillate), and Jigrol (tablet) have been described in Table 3.^[6-10]

Table 3: Ingredients of Naqū'-i-Shahatra, Arq Mako, Arq Kasni, Arq Badyan and Jigrol

Unani Formulations	Ingredients	Scientific Name	Parts Used	Form	Quantity
Naqū'-i-Shahatra	Shahatra	<i>Fumaria vaillantii</i> Linn.	Whole plant	Infusion	5 gm
	Chiraita	<i>Swertia chirayita</i> Buch.	Whole plant	Infusion	5 gm
	Sarphuka	<i>Tephrosia purpurea</i> Linn.	Whole plant	Infusion	5 gm
	Gul-e-Mundi	<i>Sphaeranthus Indicus</i> Linn.	Flower	Infusion	5 gm
	Unnab	<i>Zizyphus jujube</i> Mill.	Fruit		5 gm
	Sandal Surkh	<i>Pterocarpus santalinus</i> Linn.	Heart Wood	Infusion	5 gm
	Halela Siyah	<i>Terminalia chebula</i> Retz.	Fruit	Infusion	5 gm
Arq Mako (each 125 ml)	Mako Khushk	<i>Solanum nigrum</i> Linn.	Dry Fruit	Distillate	10.42 gm
Arq Kasni (each 125 ml)	Tukhm-e-Kasni	<i>Cichorium intybus</i> Linn.	Seed	Distillate	15.60 gm
Arq Badyan (Each 125 ml)	Tukhm-e-Badyan	<i>Foeniculum vulgare</i> Linn.	Seed	Distillate	15.60 gm
Jigrol (each tablet)	Tukhm-e-Kasni	<i>Cichorium intybus</i> Linn.	Seed	Powder	30.2 mg
	Berg-e-Jhao	<i>Tamarix gallica</i> Linn.	Leaf	Powder	69.80 mg
	Majeeth	<i>Rubia cordifolia</i> Linn.	Root	Powder	30.15 mg
	Revand Chini	<i>Rheum emodi</i> Wall. ex Meisn.	Root	Powder	58.85 mg
	Berg-e-Kasaundi	<i>Cassia occidentalis</i> Linn.	Leaf	Powder	48.13 mg
	Berg-e-Sanbhalu	<i>Vitex negundo</i> Linn.	Leaf	Powder	20.15 mg

	<i>Bao Khamba</i>	<i>Careya arborea</i> Roxb.	Fruit	Powder	29.45 mg
	<i>Berg-e-Bartang</i>	<i>Plantago major</i> Linn.	Leaf	Powder	15.19 mg
	<i>Gul-e-Surkh</i>	<i>Rosa damascena</i> Mill.	Flower	Powder	40.74 mg
	<i>Kateli</i>	<i>Solanum xanthocarpum</i> Schrad.	Whole plant	Powder	40.74 mg
	<i>Mako Khushk</i>	<i>Solanum nigrum</i> Linn.	Fruit	Powder	28.77 mg
	<i>Badyan</i>	<i>Foeniculum vulgare</i> Mill.	Seed	Powder	30.12 mg
	<i>Tukhm-e-Kasoos.</i>	<i>Cuscuta reflexa</i> Roxb	Seed	Powder	28.88 mg
	<i>Biskhapra</i>	<i>Boerhavia repens</i> Linn.	Seed	Powder	15.34 mg
	<i>Naushadar</i>	Ammonium chloride	Crystal	Powder	14.16 mg
	<i>Chob Zard</i>	<i>Curcuma longa</i> Linn.	Rhizome	Powder	35.84 mg
	<i>Filfil Siyah</i>	<i>Piper nigrum</i> Linn.	Fruit	Powder	14.0 mg
	<i>Kushta Jast</i>	Calcinated Zinc	-	Powder	15 mg

RESULTS

The clinical and pathological as well as radiological improvements of the patient were observed to be excellent. After seven days of Unani treatment, the patient experienced complete relief from fever, abdominal pain, nausea, and vomiting. His abdominal distension and bloating were reduced, and his appetite improved. Pus discharges with thinner consistency and fewer foul odors from the drainage tube were decreased to 20-25 cc per day. After one month of treatment, the patient was able to ingest a routine diet, he regained physical strength, and he was able to walk. After two months of treatment, the drainage tube was removed by the consultant. After four and a half months of treatment, the patient's health has significantly improved. His body weight was measured as 57 kg as he gained 10 kg. The pathological and radiological improvements of the patient were found excellent, as shown in Table 1 and Table 2, respectively. All prescribed Unani formulations were found to be safe and effective.

DISCUSSIONS

Naqū'-i-Shahatra is more effective and used to treat impurities of blood, including inflammations, ulcers, abscesses, toxicity of bacteria, viruses, and drugs, and skin diseases such as rashes, itching, scabies, herpes, urticaria, and eczema, etc.^[6] *Arq Mako* is used to cure weakness of the liver (*Zof-i-Kabid*) and swelling of visceral organs like the liver, stomach, pancreas, intestine, and other internal organs; it also normalizes their functioning. It normalizes excessive heat of the body.^[7,8,10] *Arq Kasni* removes excessive heat from blood, bile, and heat-induced headache. It quenches the thirst. It is highly efficacious in inflammation and enlargement of the liver and jaundice.^[7,8,10] *Arq*

Badyan relieves flatulence and indigestion. It eradicates morbid matters of liver, stomach, kidney, and urinary bladder. It is useful in disorders of the liver, stomach, and intestines and normalizes their function.^[7,8,10] *Jigrol Tablet* is a potent hepatoprotective and liver tonic. It normalizes liver functions. It promotes better appetite and digestion by stimulating bile secretion. It is effective against viral hepatitis and jaundice. It has anti-inflammatory, diuretic, digestive, and laxative properties.^[9] *Shahatra* (*Fumaria vaillantii*), *Chiraita* (*Swertia chirayita*), *Sarphuka* (*Tephrosia purpurea*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Unnab* (*Zizyphus jujube*), *Sandal Surkh* (*Pterocarpus santalinus*), *Haleela Siyah* (*Terminalia chebula*), *Mako* (*Solanum nigrum*), *Tukhm-e-Kasni* (*Cichorium intybus*), *Badyan* (*foeniculum vulgare*), *Berg-e-Jhao* (*Tamarix gallica*), *Berg-e-Sanbhalu* (*Vitex negundo*), *Tukhm-e-Kasoos* (*Cuscuta reflexa*), and *Biskhapra* (*Boerhavia repens*) possess anti-inflammatory (*Muhalli-i-Waram*) activity; they can resolve inflammation and morbid materials of the pancreas.^[11-20] *Shahatra* (*Fumaria vaillantii*), *Chiraita* (*Swertia chirayita*), *Sarphuka* (*Tephrosia purpurea*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Sandal Surkh* (*Pterocarpus santalinus*), *Berg-e-Jhao* (*Tamarix gallica*), and *Berg-e-Sanbhalu* (*Vitex negundo*) act as analgesic (*Musakkin-i-Alam*) agents; they can relieve pain caused by the inflammation of the pancreas.^[11,12,14,15] *Shahatra* (*Fumaria vaillantii*), *Chiraita* (*Swertia chirayita*), *Sarphuka* (*Tephrosia purpurea*), *Tukhm-e-Kasni* (*Cichorium intybus*), *Badyan* (*foeniculum vulgare*), *Tukhm-e-Kasoos* (*Cuscuta reflexa*), *Biskhapra* (*Boerhavia repens*), and *Majeeth* (*Rubia cordifolia*) have diuretic (*Mudirr-i-Bawl*) properties, which may excrete out the inflammatory and morbid materials of

the pancreas through urine.^[11] *Tukhm-e-Kasni* (*Cichorium intybus*), *Badyan* (*foeniculum vulgare*), *Tukhm-e-Kasoos* (*Cuscuta reflexa*), *Majeeth* (*Rubia cordifolia*), and *Biskhapra* (*Boerhavia repens*) own *Mufattiḥ-i-Sudud* (deobstruents) property, which can eliminate the congestion (*Imtilā'*) caused by inflammation in the pancreas and peripancreatic nodularity.^[11] *Unnab* (*Zizyphus jujube*), *Sandal Surkh* (*Pterocarpus santalinus*), and *Tukhm-e-Kasni* (*Cichorium intybus*) possess antibilious (*Dafey-i-Safra*) activity, which may relieve nausea and vomiting.^[11,17] *Jigrol* and *Arq Badyan* have digestive (*Hāḍim*) and carminative (*Kāsir-i-Riyāḥ*) properties, which can help in the digestion of foods and may expel gases from the gastrointestinal tract.^[7-10] *Shahatra* (*Fumaria vaillantii* Linn.), *Chiraita* (*Swertia chirayita*), *Sarphuka* (*Tephrosia purpurea*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Unnab* (*Zizyphus jujube*), and *Berg-e-Jhao* (*Tamarix gallica*) act as blood purifier (*Muṣaffī-i-Dam*) agents, which can eliminate toxic, putrefied, and waste products from blood and pancreas.^[11] *Shahatra* (*Fumaria vaillantii*), *Chiraita* (*Swertia chirayita*), *Sarphuka* (*Tephrosia purpurea*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Unnab* (*Zizyphus jujube*), *Haleela Siyah* (*Terminalia chebula*), and *Berg-e-Sanbhalu* (*Vitex negundo*) have anti-infective (*Dāfi'-i-Ta'affun*) activity, which can remove putrefied tissues of the pancreas and can prevent it from sepsis.^[11] *Chiraita* (*Swertia chirayita*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Unnab* (*Zizyphus jujube*), *Haleela Siyah* (*Terminalia chebula*), *Berg-e-Sanbhalu* (*Vitex negundo*), *Mako* (*Solanum nigrum*), *Tukhm-e-Kasni* (*Cichorium intybus*), and *Badyan* (*foeniculum vulgare*) have antibacterial (*Dāfi'-i-Jarāseem*) properties, which can kill the bacteria or stop the growth of the bacteria that are responsible for acute necrotizing pancreatitis. These drugs may relieve fever, decrease total leucocytes, and inhibit pus formation in necrotizing pancreatitis by eliminating bacterial infection.^[13,15,16,18-21] *Shahatra* (*Fumaria vaillantii*), *Sarphuka* (*Tephrosia purpurea*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Unnab* (*Zizyphus jujube*), *Haleela Siyah* (*Terminalia chebula*), and *Mako* (*Solanum nigrum*) act as vulnerary (*Mudammil*) agents that may heal wounds of the pancreas and promote regeneration after acute necrotizing pancreatitis in humans by activating pancreatic stellate cells and their myofibroblastic

offspring.^[11,12,14-16,19] *Sarphuka* (*Tephrosia purpurea*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Unnab* (*Zizyphus jujube*), *Haleela Siyah* (*Terminalia chebula*), and *Mako* (*Solanum nigrum*) act as Immune-enhancing drugs that can boost the immunity of the pancreas and body, ultimately allowing necrotizing pancreatitis to recover completely.^[14,15,16,18,19] Unani philosophers believed that medicatrix naturae (*Tabi'at*), a power endowed by nature to every individual, is the real healer (*Mu'alij Haqiqi*) of the body, and the duty of a physician is to facilitate medicatrix naturae (*Tabi'at*).^[5] *Jigrol*, *Shahatra* (*Fumaria vaillantii* Linn.), *Sarphuka* (*Tephrosia purpurea*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Unnab* (*Zizyphus jujube*), *Haleela Siyah* (*Terminalia chebula*), *Mako* (*Solanum nigrum*), and *Tukhm-e-Kasni* (*Cichorium intybus*) have Hepatoprotective (*Muḥāfiẓ-i-Jigar*) properties that can protect the liver from the toxic effects of bacteria and viruses, as well as drug-induced toxicity.^[9,12,14-16,18,19,21] *Sarphuka* (*Tephrosia purpurea*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), and *Tukhm-e-Kasni* (*Cichorium intybus*) have nephroprotective (*Muḥāfiẓ-i-Kulyah*) activity, which may protect the kidney from the toxic effects of the drugs and can reduce elevated serum creatinine in this case by normalizing kidney functions.^[14,15,21] *Chiraita* (*Swertia chirayita*), *Gul-e-Mundi* (*Sphaeranthus Indicus*), *Haleela Siyah* (*Terminalia chebula*), *Sandal Surkh* (*Pterocarpus santalinus*), *Mako* (*Solanum nigrum*), *Badyan* (*foeniculum vulgare*), and *Kasni* (*Cichorium intybus*) possess hypoglycemic activity, which can maintain blood sugar levels of the patient in a normal range.^[13,15,17-21]

CONCLUSION

It was concluded that Unani formulations; *Naqū'-i-Shahatra*, *Arq Mako*, *Arq Kasni*, *Arq Badyan*, and *Jigrol* were found to be safe and highly effective in the treatment of acute necrotizing pancreatitis (*Waram-i-Bānqarās Nakhri Hād*) clinically, with significant improvement in all related symptoms & signs; pathologically, with significant reduction in all elevated biochemical markers; and radiologically, as demonstrated the pancreas was found normal in size and echotexture just after four and a half months of treatment. Large-scale scientific studies are required to assess the drugs' effectiveness. Generally, emergency and acute illnesses should be treated with

allopathic medicine. If the allopathic drugs are not responding, then Unani medicine, as the interdisciplinary therapy, can be adopted to provide comprehensive care for a patient and to save the life of a human being.

REFERENCE

- Colledge, N. R., Walker, B. R., Ralston, S. H. (2010). *Davidson's Principles and Practice of Medicine*. (21st ed.). Churchill Livingstone: Elsevier Limited, (Chapter 22).
- S. Leonard-Muralia, J. Lezotte, R. Kalua, D. J. Blydenb, J. H. Pattonb, J. L. Johnsonb, et al. Necrotizing pancreatitis: A review for the acute care surgeon, *Am. J. Surg.*, 221(5), 2021, 927–934.
- Majoosi, A. H. A. I. A. (2010). *Kamil-us-Sana'ah*, Urdu Translation by Ghulam Husain Kantoori. (1st vol.). New Delhi: Idarah Kitab-us-Shifa, (Chapter 8).
- Ibn-e-Sina AIAH. (2010). *Alqanoon Fit Tib*. Urdu Translation by Syed Ghulam Husain Kantoori. 4th vol. New Delhi: Idarah Kitab-us-Shifa, (Chapter 3).
- Hamdani, S. K. H. (2011). *Usool-e-Tib*. New Delhi: National Council for Promotion of Urdu Language, (Chapter 1, 5).
- Kabeeruddin, H. M. (1999). *Moalajat Sharah Asbaab (Tarjama-e-Kabeer)*. (2nd vol.). New Delhi: Ejaz Publishing House, (Chapter 12).
- Anonymous. (2013). *Essential Drugs List (EDL)*. New Delhi: Department of AYUSH Ministry of Health and Family Welfare, Government of India, (Chapter 1).
- Kabeeruddin, H. M. (1999). *Beyaz-e-Kabeer*. (2nd vol.). Haiderabad Deccan: Hikmat Book Depo, (Chapter 16).
- Anonymous. (2024). *New Products – Hamdard Medicine Division*. New Delhi: Hamdard Laboratories (India), (Chapter 17).
- Anonymous. (2022). *Unani & You – Stay strong with Hamdard*. New Delhi: Hamdard Laboratories (India) Medicine Division, (Chapter 10, 11).
- Kabiruddin, H. M. (2014). *Makhzanul Mufradat*. New Delhi: Idara Kitabus Shifa, pp 94-403.
- S. Srivastava, G. P. Choudhary, Pharmacognostic and pharmacological study of *Fumaria vaillantii* Loisel: a review, *Journal of Pharmacognosy and Phytochemistry*, 3(1), 2014, 194-197.
- V. Kumar, J. V. Staden, A Review of *Swertia chirayita* (Gentianaceae) as a Traditional Medicinal Plant, *Frontiers in Pharmacology*, 6, 2016,1-14.
- V. P. Patil, S. Hugar, H. M. Nanjappaiah, N. Kalyane, M. Chowdhary, Pandarinath, *Phytopharmacology of Tephrosia purpurea Linn: An Overview*, *Pharmacologyonline*, 3, 2011,1112-1140.
- N. G. Mahajan, M. Z. Chopda, R. T. Mahajan, A Review on *Sphaeranthus Indicus Linn: Multipotential Medicinal Plant*, *International Journal of Pharmaceutical Research and Allied Sciences*, 4(3), 2015, 48-74.
- M. Adiba, M. T. Hussain, A Phyto-Pharmacological and Scientific report of *Unnab (Zyziphus jujuba Mill)*, *Am. J. Pharm. Tech. Res.*, 3(4), 2013, 233-245.
- M. Azamthulla, R. Balasubramanian, S. Kavimani, A review on *pterocarpus santalinus Linn.*, *World Journal of Pharmaceutical Research*, 4(2), 2015, 282-292.
- P. C. Gupta, Biological and pharmacological properties of *terminalia chebula retz. (haritaki)* - An overview, *Int. J. Pharm. Pharm. Sci.*, 4(3), 2012, 62-68.
- X. Chen, X. Dai, Y. Liu, Y. Yang, L. Yuan, X. He, et al., *Solanum nigrum Linn.: An Insight into Current Research on Traditional Uses, Phytochemistry, and Pharmacology*, *Frontiers in Pharmacology*, 13, 2022, 1-32.
- W. Kooti, M. Moradi, S. A. Akbari, N. S. Ahvazi, M. A. Samani, D. A. Lark, Therapeutic and pharmacological potential of *Foeniculum vulgare Mill: a review*, *J. Herb. Med. Pharmacol.*, 4(1), 2015, 1-9.
- R. A. Street, J. Sidana, G. Prinsloo, *Cichorium intybus: Traditional Uses, Phytochemistry, Pharmacology, and Toxicolog, Evidence-Based Complementary and Alternative Medicine*, 2013, 1-14

HOW TO CITE: Mohammad Shamim Khan*, Unani interventions in the Management of Acute Necrotizing Pancreatitis (Waram-i-Bānqarās Nakhri Hād): A Case Report, *Int. J. Sci. R. Tech.*, 2025, 2 (2), 199-205. <https://doi.org/10.5281/zenodo.14916682>