

Role of *Madhutailik basti* and *Shaman chikitsa* in the Management of Acute on Chronic Pancreatitis: A Case Report

REEYA GAMNE¹, SADHANA MISAR WAJPEYI², VINAY NARA³, SONIA MANDAL⁴



ABSTRACT

Chronic pancreatitis is a condition characterised by persistent inflammation of the pancreas, leading to permanent damage and loss of its exocrine and endocrine functions. Clinical symptoms of the disease include abdominal pain, nausea, vomiting, steatorrhea, indigestion, and weight loss. In Ayurveda, it can be correlated with *Grahani dosha*, a disorder of the duodenum and gut. *Mandagni*, which is the hypo-functioning of *Agni*, is considered the root cause of *Grahani dosha* and is addressed through various treatment modalities in Ayurveda. Hereby, the authors present a case report of 40-year-old male diagnosed with chronic pancreatitis presented with severe pain in the epigastric and left hypochondriac region of the abdomen, decreased appetite, nausea, and constipation for five years. After three years of conservative treatment and unsuccessful advice to undergo Endoscopic Retrograde Cholangiopancreatography (ERCP), the patient sought Ayurvedic treatment. The treatment involved *Shodhan* (purificatory) and *Shamana* (palliative) approaches, including *Vata pitta shamaka kriya*, *Mridu virechana* (mild purgation), and the use of *Yakrutottajaka* (hepato stimulant), *Pramehaghna* (pancreas protecting), and *Rasayana* (rejuvenating) formulations. Within four months, the patient experienced a significant improvement, with total remission of symptoms and a notable reduction in objective criteria such as serum lipase and serum amylase levels. The present case report suggests that Ayurvedic modalities can be effective in treating chronic pancreatitis. However, to draw definitive conclusions, further research with extensive follow-up and a larger sample size is necessary.

Keywords: Endoscopic retrograde cholangiopancreatography, *Grahani*, Purification therapies

CASE REPORT

A 40-year-old male patient visited the *Kayachikitsa* Outpatient Department (OPD) with chief complaints of severe and continuous pain in the epigastric and left hypochondriac region of the abdomen, indigestion, decreased appetite, nausea, and constipation for the last five years. He had already been diagnosed with chronic pancreatitis by an allopathic physician. He underwent conservative treatment for three years {Tab. Omeprazole 20 mg, Cap. Pancreatin (25000 IU), and Tab. Dulcoflex} and was advised to undergo Endoscopic Retrograde Cholangiopancreatography (ERCP) for the same but did not get satisfactory relief. He had been a chronic alcoholic for eight years and had been mildly hypertensive (130/90 mmHg) for the last six months, for which he was on regular medication (Amlodipine 2.5 mg). There was no significant family history of pancreatitis or hypertension. All the vital parameters and systemic examinations were normal.

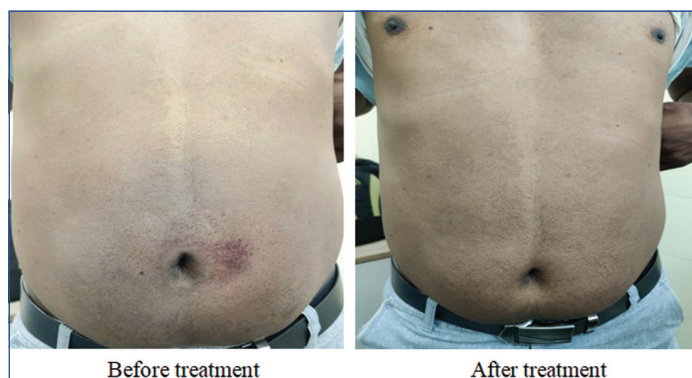
On abdominal examination: The shape and contour of the abdomen were normal with no dilated veins, visible peristalsis, striae, or surgical scars. The umbilicus was centrally placed and inverted. Cullen's sign was positive [Table/Fig-1] [1]. Upon palpation, the abdomen was slightly hard, with no organomegaly, and no

free fluid was present. Tenderness (Grade 4) was present in the epigastric region in the left upper quadrant [2]. Muscle guarding and rigidity were present. There was no rebound tenderness, and the fluid thrill test was absent.

This condition can be differentially diagnosed with peptic ulcer disease and chronic cholecystitis. Hence, the final diagnosis of acute on chronic pancreatitis is confirmed by clinical symptoms like severe abdominal pain in the epigastric region, anorexia, nausea, physical examination findings such as tenderness, and laboratory parameters like elevated serum amylase (100 U/L) and serum lipase (381 U/L), as well as Ultrasonography (USG) and Magnetic Resonance Imaging (MRI) showing borderline dilated common bile duct, atrophic pancreas, and dilated and tortuous main bile duct.

Treatment protocol: When the patient came to the OPD with severe abdominal pain, local *snehan* and *swedan* (oleation and sudation) were administered, followed by *Shodhan basti* (purificatory enema) [Table/Fig-2] stat. This was followed by *Yashtimadhu taila matra basti* (medicated oil enema) in the evening. Subsequent *Shodhana* and *Shamana* treatments were planned [Table/Fig-3,4].

The patient was advised a liquid diet such as coconut water, *takra*, fruit juices, etc., for the first two days. Gradually, they were shifted to a semi-solid diet and then solid foods such as daliya, khichdi, fruits,



[Table/Fig-1]: Cullen's sign (before and after treatment).

Medicine	Ingredients	Quantity
Niruha basti (Shodhan basti)	Dashmool kwath	450 mL
	Honey	50 gm
	Saindhava lavana	12 gm
	Sneha (Tila taila)	50 mL
	Kalka (Shatpushpa)	12 gm
	Gomutra	50 mL
	Yavak kshar	10 gm
	Total	650 mL

[Table/Fig-2]: Contents of Shodhan basti.

etc. On the 8th day, discharge treatment was given to the patient [Table/Fig-5].

Medicine	Ingredients	Quantity
1. <i>Snehan</i> 2. <i>Swedan</i> (Locally)	<i>Dashmool taila</i> <i>Nadi swedan</i>	For 8 days
3. <i>Madhutailik basti</i>	<i>Erandmoola kwath</i> Honey <i>Saindhava lavana</i> <i>Sneha (Yashtimadhu taila)</i> <i>Kalka (Guduchi)</i>	350 mL 50 gm 12 gm 50 mL 30 gm (Total- 500 mL) For 7 days
4. <i>Matra basti</i>	<i>Yashtimadhu taila</i>	50 mL On 8 th day

[Table/Fig-3]: *Shodhana chikitsa* (Purificatory treatment).

Medicine	Dose and frequency	Time of administration	Anupana	Duration
<i>Shivakshar pachan churna</i>	3 gm twice a day	Before food	Lukewarm water	8 days
<i>Gandharva haritaki powder</i>	10 gm	At bed time	Lukewarm water	
<i>Kamdudha rasa</i>	250 mg 2 tab twice a day	Before food	Lukewarm water	
<i>Shankha vati</i>	250 mg 2 tab twice a day	After food	Lukewarm water	
<i>Phaltrikadi kwath</i>	20 mL twice a day	After food	Lukewarm water	

[Table/Fig-4]: *Shaman Chikitsa* (Palliative treatment).

Medicine	Dose and frequency	Time of administration	Anupana	Duration
<i>Gandharva haritaki powder</i>	10 gm	At bed time	Lukewarm water	30 days
<i>Arogyavardhini vati</i>	250 mg 2 tab twice a day	After food	Lukewarm water	
<i>Phaltrikadi kwath</i>	20 mL twice a day	After food	Lukewarm water	
<i>Shivaksharpachan churna</i>	3 gm twice a day	Before food	Lukewarm water	

[Table/Fig-5]: Discharge medications.

On Discharge

At the first follow-up, *Arogyavardhini vati* and *Gandharva haritaki* powder were stopped, and all other medications were continued for the next three months.

The therapeutic outcome, improvement in the patient's symptoms, and quality of life are mentioned in [Table/Fig-6].

Symptoms	Before treatment 0 th day	After treatment 8 th day	1 st follow-up 30 th day	2 nd follow-up 120 th day
Abdominal pain (VAS)	9 (Severe)	2	0	0
Tenderness	Grade 4	Grade 2	0	0
Constipation	Present	Absent	Absent	Absent
Anorexia	Grade 3	Grade 3	0	0
Nausea	Present	Absent	Absent	Absent
Serum lipase	381 U/L	111 U/L	75.33 U/L	34.01 U/L
Serum amylase	100 U/L	80 U/L	30.78 U/L	38.83 U/L

[Table/Fig-6]: Therapeutic outcome of the patient.

*The grading of symptoms was measured as per the scales given in textbook "Developing guidelines for classical research methodology in Ayurveda" by Baghel MS and Rajagopala S [3]

DISCUSSION

Chronic pancreatitis is an inflammatory condition of the pancreas that causes atrophy or fibrosis, leading to a progressive loss of exocrine and endocrine functioning [4]. This illness is clinically characterised by indigestion, decreased appetite, abdominal pain, and nausea caused by *Agnisada* (diminished digestive power), associated with

Grahani in Ayurveda (derangement of *Agni* placed in *Grahani*). Pathologically, the disease initiates due to improper food digestion, further vitating *Agni* and *Doshas*, leading to the formation of ama, resulting in symptoms such as abdominal pain, nausea, dyspepsia, constipation, and diarrhoea [5].

The pathophysiology of pancreatitis can be associated with *Vataja Grahani dosha*, as *Vata dosha* is prevalent and in the *Amaavastha* (proinflammatory stage), due to the chronicity and recurrence of pancreatitis [6]. Based-on the predominance of *Dosha* and *Dhatu* (body tissue), the primary objectives of the treatment were to manage the symptoms, protect the pancreas structure and function against further disruptions, and restore the elevated biochemical values [7].

In the present case, authors observed how a patient with chronic pancreatitis received treatment according to Ayurvedic protocol, including *Langhana*, *Deepana*, *Pachana*, *Vatanulomana*, *Yakrita sanrakshatmaka*, and *Rasayana* medications. There were significant changes in subjective and objective parameters, such as a reduction in pain and tenderness, improvement in symptoms of constipation, anorexia, and nausea. Serum lipase levels (381 U/L to 34.01 U/L) and amylase levels (100 U/L to 38.83 U/L) restored to their normal levels within four months of treatment, suggesting that the treatments being taken are effective. In this instance, no side effects from the prescribed medication were noted.

Similar cases have been reported in the past. One case conducted by Singh A et al., involved a 30-year-old female, a known case of chronic pancreatitis for the last 2.5 years, who complained of continuous dull pain in the abdomen, indigestion, decreased appetite, and nausea. Serum lipase was raised. Ayurvedic management given for six weeks showed the restoration of serum lipase levels (109 to 52 U/L) and other symptoms [8]. Another similar case study conducted by Sawarkar G and Sawarkar P, involved a 12-year-old teenage girl who presented with pain and tenderness in the epigastric region, loss of appetite, fever on and off, general malaise, loss of weight, intermittent constipation, anxiety, and mental irritation for one and a half months. After 16 months of regular treatment, the patient experienced relief in all subjective parameters [9]. In both studies, the management involved the use of *Vata-pitta shamaka kriya* (pacification of vitiated *Pitta* and *Vata*), *Mriduvirechana* (mild purgation), *Yakrutottejaka* (hepatostimulant), *Pramehaghna* (pancreas protective), and *Rasayana* (rejuvenating) formulations, which showed promising results.

The probable mode of action of *Shodhan chikitsa* (Purificatory treatment): *Snehan-Swedana* (oleation and sudation) helps in relieving pain and bringing vitiated doshas into the *Koshtha* (abdomen) [10]. *Shodhana basti* (purificatory enema) helps in *Vatanulomana* (carminative) and detoxification, thus relieving pain and constipation by pacifying *Vata dosha*. *Madhutailik basti* has *Deepana* (appetiser), *Pachana* (digestive), *Rasayana* (rejuvenating), *Balya*, and *Anulomaka* (carminative) properties, helping in breaking the pathogenesis of the disease. *Guduchi* (*Tinospora cordifolia*) used as *kalka* (paste) acts as an antioxidant and immunomodulatory agent [11]. *Matra basti* (medicated oil enema) given by *Yashtimadhu taila* has *Madhura rasa* (sweet taste), *Sheeta virya* (cold potency), *Madhura vipaka* (final taste of a drug-sweet). It is *Vata-pitta shamaka*. Its healing, anti-ulcer, anti-inflammatory, and skin regeneration activity helps in reducing symptoms [12].

Mode of action of *Shaman chikitsa* (Palliative treatment): *Shivakshar Pachan Churna* has *Deepana*, *Pachana*, and *Tridosha shamaka* properties, enhancing digestive fire and relieving symptoms like anorexia [5]. *Gandharva haritaki* helps with mala *shodhana* (bowel evacuation) as well as *vatanulomana* (carminative), causing detoxification of the body by removing the vitiated *doshas* and aiding in breaking the pathogenesis [13]. *Kamdudha rasa* possesses *Madhura* and *Sheeta virya* (sweet and cold potency) drugs that pacify *Pitta dosha*, thereby helping in relieving symptoms like nausea [14].

Shankha vati improves digestive fire, thus aiding in increasing appetite and relieving nausea and pain [15]. *Phaltrikadi kwath* is *Kledahara* (removes impurities), having *Deepana*, *Pachana*, *Yakruttoojaka*, *Anulomaka*, and *Tridosha* properties that relieve symptoms like anorexia, constipation, and nausea [16]. *Arogyavardhini vati*, having hepatoprotective and antioxidant properties, improves the digestive system, opens up the body's channels so that nutrients can reach the tissues, balances body fats, and eliminates toxins [17].

CONCLUSION(S)

The present case report demonstrates the significant role of Ayurveda in successfully managing acute on chronic pancreatitis. There were significant changes in subjective and objective parameters, and improvement in the patient's symptoms within four months of treatment suggests that the treatments being taken are effective. In this instance, no side effects from the prescribed medication were noted. Hence, it can be concluded that chronic pancreatitis can be effectively managed with *Shodhan* and *Shaman chikitsa* as described in Ayurveda. However, since present case is a single case, a study on a greater number of patients is needed to prove the efficacy of these drugs.

REFERENCES

- [1] Chung MA, Oung C, Szilagyi A. Cullen's sign: It doesn't always mean hemorrhagic pancreatitis. *Am J Gastroenterol*. (Springer Nature). 1992;87(8):1026-28.
- [2] Kannan P. Management of myofascial pain of upper trapezius: A three group comparison study. *Glob J Health Sci*. 2012;4(5):46-52.
- [3] Baghel MS, Rajagopala S. Developing guidelines for clinical research methodology in Ayurveda, Institute for postgraduate teaching and research in Ayurveda. Jamnagar: Gujarat Ayurved University; 2011:69-70.
- [4] Conwell DL, Lee LS, Yadav D, Longnecker DS, Miller FH, Mortele KJ, et al. American Pancreatic Association Practice Guidelines in Chronic Pancreatitis: Evidence-based report on diagnostic guidelines. *Pancreas*. 2014;43(8):1143-62.
- [5] Patil RP, Patil PD, Thakar AB. *Panchakarma* in autoimmune pancreatitis: A single-case study. *Ayu*. 2019;40(4):242-26.
- [6] Acharya BT. Charaka Samhita of Agnivesh. Chikitsasthana. Ch. 15, Ver. 56. Varanasi: Chaukhamba Surbharti Prakashana; Reprint 2004:602.
- [7] Sarma JK. Evaluation of the effect of mustadi kwatha in the management of madhumeha vis-a-vis diabetes mellitus (NIDDM) (Doctoral dissertation, Tilak Maharashtra Vidyapeeth) 2019. Available from: <http://210.212.169.38/xmlui/handle/123456789/8980>.
- [8] Singh NK, Sengar AS, Khuntia BB, Meena AK, Babu G. Management of recurrent attacks of pancreatitis through Ayurveda. *Int J Ayurveda Res*. 2022;3(2):148-52.
- [9] Sawarkar G, Sawarkar P. Ayurvedic management of chronic pancreatitis in adolescent girl: A case report. *J Pharm Res Int*. 2021;33(33B):58-67.
- [10] Patel S, Sridhar N. Ayurvedic management of pancreatitis. *International Journal of Ayurveda and Pharma Research*. 2024;12(1):66-69. Available from: <https://doi.org/10.47070/ijapr.v12i1.3099>.
- [11] Yogita B, Lekurwale P, Mekhale S, Rathode S, Danga SK, Gulhane C. A critical review on pharmacodynamics of Basti Chikitsa and its action on enteric nervous system. *Int J Ayurvedic Med*. 2015;6(4):301-04.
- [12] Mohite JA, Dharkar NS. Ayurveda treatment protocol in alopecia (khalitya)-A case report. *J Pharm Negat Results*. 2022;13(9):4558-63.
- [13] Waghadhare MP, Bamnikar MD. Ayurvedic management of Kitibha Kushtha (psoriasis)-A case study. *World Journal of Pharmaceutical Research*. 2021;10(13):1967-72.
- [14] Prakash VB, Prakash VS, Tiwari S, Sharma S, Jaryal VP. Management of multi-relapsed chronic pancreatitis through Rasaushadhi: A case study. *Journal of Ayurveda Case Reports*. 2020;3(2):66-69.
- [15] Bendale YN, Bendale VY, Kadam AP, Birari-gawande PK. Impact on overall survival rate in pancreatic cancer with ayurvedic rasayana therapy-A case series of 4 patients. *Journal of Ayurveda and Holistic Medicine (JAHM)*. 2016;4(1):49-59.
- [16] Kahdoliya D, Patel BR, Makwana SM. Ayurveda management of Koshthashrita Kamala (Hepato-cellular Jaundice): A case report. *International Journal of AYUSH Case Reports*. 2019;3(4):254-59.
- [17] Kataria A, Kimothi S. Chronic pancreatitis and its ayurvedic management in child: A case study. *International Journal of AYUSH Case Reports*. 2022;6(4):334-41.

PARTICULARS OF CONTRIBUTORS:

1. Postgraduate Scholar, Department of Kayachikitsa, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Salod (H), Datta Meghe Institute, Wardha, Maharashtra, India.
2. Professor and Head, Department of Kayachikitsa, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Salod (H), Datta Meghe Institute, Wardha, Maharashtra, India.
3. Postgraduate Scholar, Department of Kayachikitsa, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Salod (H), Datta Meghe Institute, Wardha, Maharashtra, India.
4. Postgraduate Scholar, Department of Panchakarma, Mahatma Gandhi Ayurved College, Hospital and Research Centre, Salod (H), Datta Meghe Institute, Wardha, Maharashtra, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Reeya Gamne,
Postgraduate Scholar, Department of Kayachikitsa, Mahatma Gandhi Ayurved College
Hospital and Research Centre, Salod, Wardha-442001, Maharashtra, India.
E-mail: reeya.gamne@gmail.com

AUTHOR DECLARATION:

- Financial or Other Competing Interests: None
- Was informed consent obtained from the subjects involved in the study? Yes
- For any images presented appropriate consent has been obtained from the subjects. Yes

PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: Oct 18, 2023
- Manual Googling: Jan 18, 2024
- iThenticate Software: Mar 04, 2024 (8%)

ETYMOLOGY: Author Origin

EMENDATIONS: 8

Date of Submission: Oct 17, 2023

Date of Peer Review: Jan 03, 2024

Date of Acceptance: Mar 06, 2024

Date of Publishing: May 01, 2024