

**EFFICACY OF AYURVEDIC MEDICINE IN THE MANAGEMENT OF RECURRENT
ACUTE PANCREATITIS- A CASE STUDY**

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ABSTRACT

A pre diagnosed case of 17 years old male patient suffering from recurrent pancreatitis since last 12 months. Serum biochemical investigation shows high level of serum lipase and amylase while liver function test was within limit. Ultra sound examination of the abdomen and pelvis showed enlarged Pancreas with minimal peripancreatic fluid, prominent pancreatic duct and changes of recurrent acute or chronic pancreatitis (RACP). The classical symptoms abdominal pain, vomiting, nausea, indigestion, oily stool and weight loss were present in the patient. After six months modern medications he didn't get proper relief, for which patients came to visit the OPD of kayachikitsa GAC Bilaspur Chhattisgarh. Patients was examined as per routine procedure and advised for specific herbomineral medications. Tamra sindur yoga along with supportive Ayurvedic medicine was given by orally twice a day. This treatment regimen was continued for two months. During this period the patients was under medical supervision with strict diet control and had taken the medicine at home with every week follow up to the hospital. After three months of therapy serum amylase and lipase level was compared before and after the treatment. The patient responded well to the above treatment and observed a significant reduction in the biochemical parameters.

KEYWORDS: Pancreatitis, recurrent acute and chronic pancreatitis, tamra sindur.

INTRODUCTION

Pancreas is a mixed type of digestive gland which performs both endocrine and exocrine functions.^[1] Anatomically it located in human body between epigastrium and left hypochondrium. In adults, pancreas measures between 12 and 15 cm and is shaped as flattened tongue of tissue. The endocrine part of pancreas produces several hormones, including insulin, glucagon, somatostatin and pancreatic polypeptide. These hormones are very important and involved in the homeostasis of blood glucose and are also involved in the control of upper GI motility and function whereas, the exocrine part is responsible for the digestion of carbohydrates, proteins and lipids. The two major enzymes trypsinogen and chymotrypsinogen involved in the digestion of protein. Where the lipase and amylase involved in the digestion of fat.^[2]

Pancreatitis is a pathological inflammatory condition of the pancreas. It may be classified as Acute Pancreatitis and Chronic Pancreatitis (APCP).^[3,4] Severe acute pancreatitis (SAP) is the most serious type of this disorder. Globally, the incidence of acute pancreatitis is

5-35/10 0,000 new cases per year worldwide, with a mortality rate of about 3%. The incidence of chronic pancreatitis is 8.2 new cases per 100,000 per year and a prevalence of 26.4 cases per 100, 000.^[5] The disease affects more male population than female population, the average onset of the disease is 24 years. highest incidences In India reports ranging from 114-200/100,000 in southern population. The report indicates that India has highest incidences of Tropical Chronic Pancreatitis (TCP).^[6,7]

Pancreatitis is a inflammatory disorders, which refers to inflammation of the pancreas and is primarily characterized by abdominal pain, nausea, vomiting and indigestion.^[8] Repeated episodes of abdominal pain and other symptoms elevated serum Amylase or Lipase levels without morphological changes in the pancreas is termed as recurrent acute pancreatitis (RAP) while, signs and symptoms associated with morphological changes in the pancreas is called Chronic Pancreatitis (CP). Due to RAP/CP brings gradual fibrotic changes in the pancreas resulting in loss of exocrine and endocrine functions,

leading to diabetes mellitus, oily stool and unexplained weight loss).^[9]

In ancient Ayurveda classics Pitta has been described as Agni or fire, it performs same action as digestive fire such as pachana (digestion), dahana (burning, combustion, oxidation), parinama (conversion), paravritti (transformation, mutation) prakashana (illumination, radiation), ranjana or varnakaram (coloration) prabhakaram (lustre) and tapana (heat production).^[10] Among five types of pitta, Pachakapitta may refer to the gastrointestinal hormones responsible for the excitation of achhapitta. Like pitta, enzymes are also present, universally and are built up by the body from appropriate substances derived from aharadravyas (nutrition). Thus, in pitta we have substances exactly similar to enzymes.^[11] There is no direct or indirect reference of Pancreatitis in classical Ayurvedic literature except a term called 'UdarShool' (abdominal pain). Several medicines are indicated to manage the udarshoola in Ayurveda. In which Tamra sindur (TS) have been found very effective result in the management of RAP/CP. Copper is highly toxic to human body in metallic form but also possesses anti-inflammatory properties.^[12,13] Rasa Shastra could be defined as the science of Mercury, which is the third most toxic metal. There are elaborate methodologies for processing Mercury. It is said that Mercury turns therapeutically potent by increasing the frequency of sublimation with Sulphur.^[14,15]

History of present illness

A male of 17 years old school going boy came to GAC&H Bilaspur with complaints of abdominal pain, nausea and vomiting. Serum amylase and lipase level was high while liver function test was within limit which was diagnosed as RAP by gastroenterologist. There he was advised for palliative treatment from his physician.

He refused and came to GAC&H to take Ayurvedic treatment.

Pain in abdomen, (Since 15 days).

Continuous nausea, (Since 15 days).

Vomiting (Since 5 days)

History of past illness

The patient was physically fit and healthy before 2 years ago. He had no such history of complaints of pain before; during this period he had joined a fitness centre and advised a special diet chart by his instructor. After few months he felt mild abdominal pain, indigestion and morning vomiting sickness. He visited his family physician intermittently between 6 months and got relief by his treatment. Once symptoms aggravated his physician referred him to a gastroenterologist and he was diagnosed as RAP. He consumed medication approx half a year and felt relief by symptomatic treatment. But biochemical parameter serum lipase and amylase was still high then normal limit, he did not satisfy with this treatment. Hence he decided to consult in ayurveda hospital.

Family history

No evidence of this type of disease in the family.

Physical examination

General condition - Fair.

PR - 76/min, regular.

BP - 120/70 mm of Hg.

RR - 18/min, regular

Body temperature: 98.6 F

Mild yellowish sclera

Pulse: 76/min

Icterus present +

Systematic examination (per abdomen) - pain in epigastric region and left hypochondric region.

Investigations

Table 1: Summarizes the blood profile and ultrasound investigations before and after treatment.

Parameters	Before treatment	After treatment
Hb in gm%	13.7	13.8
TLC(cells/cumm)	7180	6700
RBC million cells/ mm	5.15	5.11
ESR mm/hour	13	12
Serum Lipase IU/L	6213	79
Serum amylase IU/L	758	56
Bilirubin (Total) mg/dl	0.7	0.9
Bilirubin (Direct) mg/dl	0.2	0.3
Bilirubin (Indirect) mg/dl	0.5	0.6
SGOT U/L	15	16
SGPT U/L	16	20
Alkaline Phosphate U/L	70	90
USG abdomen	Diffusely enlarged pancreas with minimal peripancreatic fluid, prominent pancreatic duct 4.5mm in tail and body with altered echogenicity tail and body, changes of recurrent acute or chronic pancreatitis.	Mild enlarged pancreas with changes of echogenicity of tail, changes of acute pancreatitis.

Treatment

Patient was given Tamra sindur along (TS) along with Kamdudha, Prawal pisti and Sutsekhar ras orally in the dose of 125 mg each twice a day after meal for 1 month. After 15 days with gap interval the treatment regimen was continued continuously for a total period of 6 months.

DISCUSSION

RAP is an inflammatory disease and it leads to fetal conditions gradually. Tamra sindur (TS) is an inorganic origin. It is a kupipakwa based rasayan containing mercury, sulphur and copper. It contains only minerals and has no herbal ingredient. This medicine is indicated in the treatment of agni and agnisthandusthi- janya diseases.^[16] In ayurvedic concept liver and pancreas is the important place of agni. In condition of vitiation of agni these organs also affected and body gets as condition as mandagni. TS is very hot in potency, it reduces the mandagni, increases appetite and regulates the proper discharge of bile and pancreatic juices to cure chronic digestive impairment. The use of TS medicine decrease enlargement of liver and pancreas. It regulates proper discharge of bile and pancreatic juices. TS give relief in intestinal discomfort and indigestion.

CONCLUSION

From the present study, it may be concluded that the effect of tamra Sindur along with prawal pisti and sutsekhar in the management of RAP have shown encouraging results, with serum lipase level by slowing down from 6213 IU/L to 79 IU/L and decreasing of serum Amylase were noted 758 IU/L to 56 IU/L. There was no any adverse effect found during and after the whole procedure in this case. Hence the prepared formulation can be taken for the multicentre trials in larger population to precisely infer its therapeutic efficacy and safety.

Footnotes

Contributors: C.P. Sinha and S.K.Singh did the writing of the manuscript, N. Kunjam was responsible for the diet planning. P.K. Majhi and H.C.Patel has done critical manuscript editing.

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