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AYURVEDIC MANAGEMENT OF ACUTE PANCREATITIS- A CASE REPORT

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ABSTRACT

Acute pancreatitis is an emerging problem in children which is rising in last two decades. A case of acute pancreatitis of 15 yr old child was reported. The diagnosis was made on the basis elevated Serum Amylase, Serum Lipase and Ultrasonography. The patient has shown interest to *Ayurveda* treatment. An *Ayurveda* medicinal management was done and found effective in the case of acute pancreatitis. Serum markers return to normal on fourth day of treatment. Patient was advised to follow the *Ayurveda* management for 3 weeks. Follow up report has shown encourageous results.

Key words: Acute pancreatitis, *Ayurveda*, Serum Amylase, Serum Lipase and Ultrasonography.

INTRODUCTION

Acute pancreatitis is the most common pancreatic disorder in children.[1] Blunt abdominal injuries, biliary microlithiasis, multisystem disease, congenital anomalies, mumps and other viral illnesses account for most known etiologies,[2] many cases are of unknown etiology or are secondary to a systemic disease process. Child abuse is recognized with increased frequency as a cause of traumatic pancreatitis in young children. The precise sequence of events leading to pancreatitis has not been completely defined. The classic theory suggests that following an initial insult, such as ductal obstruction, lysosomal hydrolase co-localizes with pancreatic proenzymes within the acinar cell. The patient with acute pancreatitis has abdominal pain, persistent vomiting, and fever.[3] The pain is epigastric and steady, often resulting in the child's assuming an antalgic position with hips and knees flexed, sitting upright, or lying on the side. The child is very uncomfortable and irritable and appears acutely ill. The abdomen may be distended and tender. A mass may be palpable. The pain increases in intensity for 24–48 hr, during which time vomiting may increase and the patient may require hospitalization for dehydration and may need fluid and electrolyte therapy. The prognosis for the acute uncomplicated case is excellent. Acute pancreatitis is usually diagnosed by measurement of serum amylase and lipase activities.[4,5] The serum amylase level is typically elevated for up to 4 days. Ultrasound and computed tomography (CT) scanning have major roles in the diagnosis and follow-up of children with pancreatitis. Findings may include pancreatic enlargement, a hypoechoic, sonolucent edematous pancreas, pancreatic masses, fluid collections, and abscesses at least 20% of children with acute pancreatitis initially have normal imaging studies.[6] The medical management of acute pancreatitis is to relieve pain and restore metabolic homeostasis. Therefore Analgesia,

fluid therapy, nasogastric suction (especially useful in patients who are vomiting), prophylactic antibiotics are employed. Endoscopic therapy and surgical therapy rarely needed in acute pancreatitis. The entire medical therapy employed in the management of acute pancreatitis is having their own side effect.

There is no exact correlation to acute pancreatitis in *Ayurveda*. Acute pancreatitis can be indirectly correlated with *Pittaja Guluma*. On the basis of involving *doshas* its aetiopathogenesis should be understood as *Pitta Prakopa* in term of *Ushna Tikashna Vriddhi* which led to *Paka Karma Vriddhi* in *Pitta Sthana (Pittaja Gulum) Agnisaad (Pittavrita Samana).* In this disease clinical features like pain, rise in body temperature and vomiting due to *Aavrita Samana Vata*.[7] *Pitta Vridhi Vata Marga Avarodha* cause *Raktapitta* collection in *Udara* which later on created *Jalodara* (Ascites). *Pitta Vridhi Prakopa* and *Vata Gati Hanana* result in *Gulum* and *Jalodara, Aavrita Samana* leading *Agnisaad*. *Apatarpana* is severely present. Management includes *Laghu Santarpana Deepaniya Yavagu, Shrita Yoosha, Pitta Sammana, Agni Vardhana.*

CASE PRESENTATION

A male patient aged 15 yrs was visited to pediatric OPD with complaint of severe abdominal pain with vomiting since last night on 08/12/2014 (OPD No.40733/ 14-15). Before reaching OPD patient was received painkiller injection from local physician in morning. No history of any drug intake, trauma and infectious disease like measles, mumps and chicken pox etc. Past history of such type of abdominal pain six month back which was relived on taking modern treatment but no obvious diagnosis was made. On examination patient was found no anemia, no icterus, no cyanosis and no clubbing except facial puffiness. Pulse rate was 90 / min, BP 114/70 mmHg, respiratory rate 25/min along with normal body temperature. On systemic examination abdominal pain was started from epigastric region and radiating to back with local tenderness in epigastrium region. Case was taken up and some essential investigation was suggested to patient like complete blood count, liver function test, serum amylase, serum lipase, random blood sugar, routine urine examination and whole abdomen Ultrasonography. All the reports were suggested acute pancreatitis.(Table No-1 & 2)

TREATMENT

Patient was advised to hospitalization but on refusal, treatment was planned on OPD level. Following treatment was prescribed for three days.

1. Tab Septilin (Himalaya Herbal Health Care) two tablet thrice daily
2. Syrup Liv 52 (Himalaya Herbal Health Care) two T.S.F thrice daily
3. Giloy juice 10ml TDS (Utkarsha Arogaya Pvt.Ltd.)
4. Tab Vomitab (Charak Pharma Pvt.Ltd.) one if required.
5. Shoolvajarini vati one tablet if required.

During this treatment patient was advised to take liquid for first day and if no vomiting then semi liquid diet was taken from second day, if accepts well then semisolid diet from third day onward with reporting in OPD after three days.

Follow up

After four days patient was attending OPD for first follow up on 12/12/2014 with relief in abdominal pain with no vomiting with acceptance of semi liquid diet. On abdominal examination there was no tenderness in epigastric region. Patient was suggested to

repeat serum amylase and lipase. Reports were found to be normal. Patient was suggested to continue the same treatment for 5 days with normal diet. After 5 days patient was attending OPD for second follow up. Patient was suggested to repeat serum amylase and lipase which were found normal. Patient was advised to continue same treatment for two weeks. After two weeks patient was attended OPD for third follow up. It was observed that all the symptoms and signs were subsided with no obvious abdominal finding. Patient was advised to repeat all blood investigation along with whole abdomen Ultrasonography. All the investigation was tabulated. (Table No 1 & 2)

DISCUSSION

Abdominal pain is very common problem among all children in which acute pancreatitis is one of the causes. In this case clinical diagnosis was made initially which were later on supported by increased serum amylase and lipase level with abdominal Ultrasonography. The present finding (clinical improvements) was observed with effective management of acute pancreatitis with *Ayurvedic* formulations without untoward effects which highlights the future scope of traditional therapy in acute pancreatitis. In acute pancreatitis there is exocrine insufficiency which leads less secretion of pancreatic enzyme resulting indigestion and malabsorption. It causes diarrhea & steatorrhea (in acute phase severe abdominal pain, vomiting and fever). *Agnivardhan Chikitasa* was decreased the load on pancreas that result fast recovery from inflammatory changes.

Guduchi (Tinospora cordifolia (willd) have properties like *Agnidipana*, *Kapha Rakta Prashamana*,[8]immunomodulation[9], anti bacterial[9] and anti inflammatory.[10] Liv 52 contains number of herbs which shows hepatoprotective,[11] rejuvenative, digestive and anti infective property. Septilin is also herbal compound which shows anti-inflammatory, antimicrobial, immunomodulatory, and antioxidant actions. [12] All these treatment help to bring serum amylase and lipase to normal level with normal shape, size and echo texture of pancreas.

CONCLUSION

Acute pancreatitis is quiet common abdominal disorder for which patients seeks medical intervention. Although modern medical treatment is quiet effective but have side effects. Acute pancreatitis can be indirectly correlated with pittaj Gulma. Here in this case *Ayurveda* medicinal Management has shown a remarkable recovery. It may open a new path to the clinicians and researchers for finding the medicinal option for the treatment of acute abdominal disorders. There are lots of *Ayurvedic* formulation which are quiet effective and safe to treat abdominal disorders. But they are needed to be time tested now. Over all present study proves effective and safe management of acute pancreatitis through herbal medicine.

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Table No 1 showing Blood investigation reports before, during and after treatment

Particulars	Before	During	During	After treat-

	treatment (08/12/2014)	treatment (12/12/2014)	treatment (16/12/2014)	ment (30/12/2014)
HB% (gm/dl)	13.1	-	-	11.8
TLC (per cubic mm)	13060	-	-	8100
DLC	P-76,L-15,M-6,E-2, B-1	-	-	P-51, L-41,M-3,E-4,B-2
ESR (mm after Ist hour)	35	-	-	5
Platelet count(per cubic mm)	101000	-	-	224000
Serum bilirubin (Total) (mg/dl)	0.84	-	-	1.20
Serum bilirubin (Direct) (mg/dl)	0.23	-	-	0.32
Serum bilirubin (Indirect) (mg/dl)	0.61	-	-	0.88
SGOT (U/L)	12.55	-	-	60
SGPT(U/L)	37.13	-	-	132
Serum Alkaline Phosphatse (IU/L)	161.6	-	-	190
Serum Amylase (U/L)	1120	57.09	80.0	58
Serum Lipase (U/L)	200	110	109	60
Serum Total Protein (gm/dl)	6.43	-	-	7.36
Serum albumin (gm/dl)	3.36	-	-	4.00
Serum Globulin (gm/dl)	3.07	-	-	3.36
A/G ratio	1.09:1	-	-	1.19 : 1
Urine Complete	Normal	-	-	Normal

Table No 2 showing Ultrasonography reports before, during and after treatment

Particulars	Before treatment (08/12/2014)	During treatment (16/12/2014)	After treatment (30/12/2014)
Liver	Mild enlarge grade I echogenic No IHBD Dilatation Portal vein Normal	Mild enlarge grade I echogenic No IHBD Dilatation Portal vein Normal	Normal size & Homogenous parenchyma echo texture No focal lesion seen No IHBD Dilatation Portal vein Normal
Pancreas	Not visualized due to bowel gases	Mild Bulky with altered echo texture Pancreatic duct not dilated	Normal Shape, size & echo texture Pancreatic duct not dilated

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