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A CASE NARRATIVE ON CHRONIC CALCIFIC PANCREATITIS

Gastroenterology

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ABSTRACT

Chronic Calcific pancreatitis is the formation of calculi in the pancreatic duct that become clogged by proteinaceous plugs that over time can accumulate calcium carbonate. As a result of blockage of the duct by the calculi epigastric pain may occur. A wide range of factors contribute to the development of CCP including alcohol abuse and malnutrition. A 55 year old female with recurrent abdominal pain was diagnosed as chronic Calcific pancreatitis based on USG Abdomen report.

KEYWORDS

CCP, pain, ERCP, ESWL, pancreatin

INTRODUCTION

Chronic calcific pancreatitis occurs due to scarring along with chronic inflammation and lithiasis of pancreas, especially in the pancreatic duct[1]. Pancreatic lithiasis can lead to either true stones in the ducts (Pancreatic calculi) or pseudo stones due to calcification of parenchyma. In pancreatic calculi, the ducts become clogged by proteinaceous plugs that in due course can accumulate calcium carbonate[2]. The calculi occur in ducts of all sizes and vary in size from microscopic to greater than 1 cm in diameter. As a result of blockage of the duct by the calculi pain occur, which is usually located in the mid epigastrium, but can occur or radiate anywhere. Other symptoms are nausea, vomiting, diarrhea, jaundice, weight loss, malabsorption, diabetes etc. Unlike acute pancreatitis, chronic pancreatitis cause irreversible changes in the architecture and functions of pancreas. A wide range of factors contribute to the development of CCP including alcohol abuse, malnutrition, genetic factors, oxidative stress, cyanogen toxicity and trace element deficiency.

Traditionally, CCP has been treated with pain medications as most of the patients experience severe pain[1]. If patients develop endocrine or exocrine insufficiency from sufficient damage to the pancreas, they may require oral hypoglycemic agents or insulin for treatment of diabetes. Classically, many of these patients were treated with pancreatic enzymes like lipase if they had maldigestion of food. In addition, taking pancreatic enzymes seems to decrease pain in some patients.

CASE PRESENTATION

A 55 year old female, previously well, came to our hospital with a long history of recurring abdominal pain. She had no other medical or surgical history. There was no history of abdominal trauma neither a family history of pancreatitis.

On physical examination, she had epigastric tenderness as well as right upper quadrant tenderness. Her vitals were found to be normal. Lab investigations did not show any significant variation.

The physician ordered for USG Abdomen, which revealed 1.4mm calculus in pancreatic duct. For further examination, LET abdomen was performed, which showed 2 intraductal calculi of size 1.7*0.9 cm and 1.3*0.7 cm in the pancreatic duct.

Based on subjective and objective evidence, the case was diagnosed as Chronic Calcific Pancreatitis and doctor planned for ERCP (Endoscopic Retrograde Cholangiopancreatography) on day 3 of admission.

The physician started with Inj. Vitamin K 10 mg OD and T.Ultracet TDS on day 1 which was continued till the day of surgery. No other drugs or IV fluids were given on these days.

ERCP was carried out in day 3 with pancreatic stenting. Surgical evaluation revealed normal ampulli. During procedure, pancreatic cannulation and pancreatic sphincterotomy were done. Small fragments of pancreatic stones were removed and stent placed.

After surgery, Inj. Pactiv 1 g, Inj Tramadol 50 mg and Inj Emeset 40 mg were given as stat medicines, IVF NS 500 ml and IVF RL 500 ml were also given. Inj. VIATRAN (Cefoperazone + Sulbactam) 1.5g BD, T RAZO (Rabeprazole) 20 mg BD, Inj P MOL (Acetaminophen) 1 g BD and T PANLIPASE (Pancreatin) 150 mg BD were given after surgery and were continued.

The patient was feeling better with no noticeable complications after surgery and hence discharged on the 6th day with T PANLIPASE 150 mg BD, T ANTOXID P, T RAZO, T ULTRACET (Acetaminophen + Tramadol) SOS, T HYOCIMAX S (Hyoscyamine) 0.125 mg SOS and was advised to follow soft diet for 1 week and review after 1 week in OPD.

DISCUSSION

The first case of Chronic Calcific Pancreatitis (CCP) in the tropics was reported in Indonesia. But now it is being increasingly reported in the developing tropical and subtropical areas. In India, it is most commonly encountered in Kerala but it's also been increasingly reported in other parts of the country like Karnataka, Hyderabad, Northern India.

As per the previous reports published, pain was the most commonly encountered symptom as in our patient and in all the cases it was managed by a higher class analgesics based on the severity of pain. The other most commonly encountered symptom was diabetes which was not presented by our patient. Until now, no association could be entrenched between the grades of calcification and the severity of pain or the endocrine/exocrine dysfunction of the pancreas.

As per various records, common indications for ERCP include treatment of symptomatic stones, strictures. Ductal decompression by sphincterotomy or stent placement offers pain relief in most patients. Extracorporeal Shock Wave Lithotripsy (ESWL) followed by ERCP for obstruction is another option of treatment[7].

Furthermore, administration of pancreatic enzymes like pancreatin were shown to improve digestive problems after surgery.

REFERENCES

1. Kant R, Sudan A. Chronic calcific pancreatitis associated diabetes presenting as involuntary weight loss and multiple soft tissue calcifications in a young male. Journal of Diabetes and Endocrinology Association of Nepal. 2018;2(2):52–5.
2. Cauble E, Dries A, Susi B. Can reflux disease cause pancreatitis? A case report of a rare cause of chronic calcific pancreatitis. American Journal of Gastroenterology. 2011;106.
3. Rai RR, Acharya SK, Nundy S, Vashisht S, Tandon RK. Chronic calcific pancreatitis: Clinical profile in Northern India. Gastroenterologia Japonica. 1988;23(2):195–200.
4. Bhasin DK, Rana SS, Chandail VS, Singh G, Gupta R, Kang M, et al. Clinical profile of calcific and noncalcific chronic pancreatitis in North India. Journal of Clinical Gastroenterology. 2011;45(6):546–50.
5. Soundara Rajan L, Amudhan A, Rajendran S, Naganath Babu OL. Chronic calcific

pancreatitis: Complications and management – a single centre experience from South India. HPB. 2018;20.
6. Garg R, Bansal P, Aggarwal S. Idiopathic chronic calcific pancreatitis in a child: An uncommon entity. Journal of Natural Science, Biology and Medicine. 2013;4(1):230.
7. Dumonceau J-M, Costamagna G, Tringali A, Vahedi K, Delhaye M, Hittelet A, et al. Treatment for painful calcified chronic pancreatitis: Extracorporeal shock wave lithotripsy versus endoscopic treatment: A randomised controlled trial. Gut. 2007;56(4):545–52.