CASE REPORT

Rare Periampullary Carcinoma: A Case Report

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SUMMARY

Periampullary carcinoma is usually used to define a heterogeneous group of neoplasms raised on the head of the pancreas, duodenum, and distal common bile duct. Most of the periampullary growths are adenocarcinomas. Timely diagnosis and successful surgical treatment are dependent on the first physician. A 60 years old male patient was presented to medical outpatients of Bahawal Victoria Hospital Bahawalpur in October 2019 with a rare etiology of unexpected vomiting, nausea, fatigue, weight loss, and abdominal cramps for 12 days continuously. Abdominal ultrasound revealed a hypo-echoic mass with a measurement of 2.6x2.7cm on the head of the pancreasobstructingthe distal common bile duct with mild intrahepatic cholestasis. Based on physical examination signs& symptoms and lab investigations patient was considered of having periampullary cancer and a prompt Whipple plan was prepared. The vigilance of the physician and support of the patient's family helped to make an early decision of pancreatoduodenectomy of the patient before the multi nodulation of the tumor hence, increased the life expectancy.

Keywords: Periampullary, Whipple Plan, Pancreatoduodenectomy, Pancreatic Cancer.

INTRODUCTION

Periampullary carcinoma is usually used to define a heterogeneous group of neoplasms raised on the head of the pancreas, duodenum, and distal common bile duct. This is different from ampullary carcinoma as the topography of the tumor is centered in this position and anatomically twisted among three organs (Braasch, et.al, 1975). Holzheimer et.al, 2001 reported that periampullary carcinoma is responsible for >30000 annual deaths in the United States. It is different from ampullary carcinoma on basis of its origin and transformation in prognosis and resects ability (Holzheimer, et.al, 2001).

Incidence of carcinomas involving the pancreas has been reported to be 12.4/100000 annually and only around 1.5% are diagnosed during their lifetime (Ries, et.al, 2003). Although the incidence of these types of cancers is low however it is associated with low survival rates and ranked fourth or fifth most common cause of cancer mortality. Incidence of this type of cancer is not known in Pakistan though in India it is reported to be 0.2-1.8/100000 among women and a higher rate of 0.5-2.4/100000 in men (Dhir, et.al, 1999). Calhoun et.al, 2008 reported decreasing trends of mortality and incidence of cancers related to the pancreas from 1992 to 200 and showed static mortality due to pancreatic cancer among standardized age groups (Chalhoun, et.al, 2008).

Most of the periampullary growths are adenocarcinomas as reported in Lahey clinic that 95.2% of cases among 348 patients who underwent pancreatoduodenectomy were diagnosed as adenocarcinoma in the last 30 years. Timely diagnosis and successful surgical treatment are dependent on the first physician, who is suspicious of periampullary carcinoma (Braasch, et.al, 1975). The present case report aims to show the vigilance of physicians in the timely diagnosis of periampullary cancer patientswho presented with complaints of vomiting forseveral days with nausea, fatique, and weight loss.

CASE REPORT

A 60 years old male patient was presented to medical outpatients of Bahawal Victoria Hospital Bahawalpur in October 2019 with a rare etiology of unexpected vomiting, nausea, fatigue, weight loss, and abdominal cramps for 12 days continuously. Vomits were yellowish with fever, anemia, yellow discoloration of eyes, clay-like stool, and dark yellow urine. Physical examination of the patient

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Received on 11-10-2021 Accepted on 22-04-2022 presented with classically-palpable gallbladder and a jaundice-like appearance were observed. The patient had middle socio-economic status and belongs to the village and resides around 100 km away from the tertiary care hospital and hasa history of smoking with active smoking of 5 cigarettes a day.

The patient was advised laboratory testing for complete blood counts (CBC), renal function test, liver function test, serum electrolytes, random blood sugar, Hepatitis B Virus Antigen, Antibody, Hepatitis С Virus abdominal ultrasound, echocardiogram, Echo cardiograph, Chest X-ray P A view, prothrombin time and activated partial thromboplastin time. Abdominal ultrasound revealed a hypo-echoic mass with a measurement of 2.6x2.7cm on the head of the pancreasobstructingthe distal common bile duct with mild intrahepatic cholestasis. The further patient was diabetic and on oral hypoglycemia for one year or so. Liver function tests were raised with high bilirubin, transaminases, and alkaline phosphatase. Blood sugar was controlled and other tests including echocardiography were reported to be with the normal size of the left ventricle having good systolic function while grade I diastolic dysfunction was observed. The rest of the investigations were negative or within the normal range.

Based on physical examination signs& symptoms and lab investigations patient was considered of having periampullary cancer and a prompt Whipple plan was prepared. Written consent from the patient and attendant who was a blood relative of the patient was taken before surgery as pancreatoduodenectomy is the only and last hope for the survival of the patient. After successful surgery patient is stable now and recovering from wounds briskly while related treatment is going on side by side.

The patient and his family showed a very positive attitude and remained cooperative with the physician. They showed their concern in lab testing and never were hopeless about the decisions of the healthcare team. The patient himself is also ready to have any procedure which can save his life.

DISCUSSION

Prompt diagnosis and early management of the patients with periampullary carcinoma and other cancers related to the pancreas is the only key to success for batter recovery and life expectancy of patients (Braasch, et.al, 1975). Since the etiology is very rare and one may take much time sometimes to reach conclusion results in delayed diagnosis and treatment as well. Urgent decisions of surgery sometimes are not acceptable for patients or their

attendants due to many reasons in present settings but their cooperation is of great importance at this stage.

National Institute of Health, United States, has a National Cancer Institute which generates data on surveillance, epidemiology and result program (SEEP) among cancer patients which estimated 56770 new cancer cases to date in 2019, of which pancreas related cancers were 3.2%, similarly total deaths due to cancers remained 45750 till date in 2019, of which pancreatic cancer-related deaths are 7.5% clearly showing more than double of the proportion of occurrence of cancer. Further, the chances of survival for 5 years, once diagnosed with pancreatic-related cancers is also reported to be only 9.3% (SEEP, 2019). We lack such information in Pakistan as no public surveillance and cancer registry is present at public as well as private hospitals.

The presently classical palpable gallbladder was observed by the physician as a study reported that the classic palpable gallbladder in the presence of painless jaundice has been seen in about one-fourth of patients with the resettable disease. The gallbladder may not be palpable because of hepatomegaly or because of scarring from previous inflammation. Therefore, periampullary cancer may not be omitted if the gallbladder is not palpable (Braasch, et.al, 1975). Brown et.al, concluded that around 80% of the patients who undergo pancreaticoduodenectomy among node-negative periampullary cancer further reported that long-term survival is expected once the patients survive for 3 years after surgery (Brown, et.al, 2005) completely support the decisions taken in the present study.

The present study is also in agreement with a recent study determined by He, et.al, which also supported timely prediction and in time pancreatoduodenectomy of periampullary carcinomas (He, et.al, 2018). On the other hand, prognosis has been reported to be poor usually and multi-model approaches comprising endoscopy, surgery, and oncology are recommended (Sarocchi et.al, 2018) are in concordance with the present study.

CONCLUSION

Literature supports the timely prediction and prompt surgery of periampullary cancer based on available physical, clinical, biochemical, and imaging shreds of evidence as is done in this case. The vigilance of the physician and support of the patient's family helped to make an early decision of pancreato-

duodenectomy of the patient before the multi nodulation of the tumor hence, increased the life expectancy.

Conflict of interest: Nil

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