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**Cash Report**

# A rare case presentation of Hodgkin's lymphoma in peripancreatic and perisplenic lymph node

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## ABSTRACT

Hodgkin`s lymphoma diagnosed in the peripancreatic and perisplenic lymph node without affecting the other lymph nodes is a rare entity, accounting to 0.5 % among the other regional lymphomas . We hereby present a case of 41 year old male with an ill-defined epigastric mass and radiologically the lesion was suggested to be Malignant Neuroendocrine tumor of Pancreas. Patient underwent distal pancreatectomy with splenectomy and after an extensive histopathological examination with correlation of immunohistochemistry; the final impression of Hodgkin's lymphoma-Mixed cellularity type, in peripancreatic and perisplenic lymph nodes was reported.

**Keywords:** Peripancreatic nodes, Perisplenic nodes, Hodgkin's lymphoma, Mixed cellularity

## INTRODUCTION

Hodgkin`s lymphoma diagnosed in the peripancreatic and perisplenic lymph node without affecting the other lymph nodes is a rare entity, accounting to 0.5 % among the other regional lymphomas.[1] We hereby present a case of 41 year old male with an ill-defined epigastric mass and radiologically the lesion was suggested to be Malignant Neuroendocrine tumor of Pancreas. Patient underwent distal pancreatectomy with splenectomy and after an extensive histopathological examination with correlation of immunohistochemistry; the final impression of Hodgkin's lymphoma-Mixed cellularity type, in peripancreatic and perisplenic lymph nodes was reported.

## CASE REPORT

A 41 year old male presented with four weeks history of evening rise of temperature and progressive loss of weight and appetite. On clinical examination, he was found to be pale, febrile and diagnosed to have a palpable ill-defined mass at the epigastric region. There was no clinical evidence of peripheral lymph node enlargement. Laboratory investigations revealed anaemia with haemoglobin concentration of 7.9gm/dl, an increase in Serum Amylase (5713 U/L) , mild increase in liver function tests (S.G.O.T- 57 U/L , S.G.P.T-61 U/L, Alkaline phosphatase – 134 U/L) and increase in blood glucose (740mg/dl). Serum electrolytes and other haematological parameters were normal. CECT whole abdomen showed a hypervascular mass involving the tail of pancreas with multiple lymphadenopathy in the para aortic region suggesting a diagnosis of malignant neuroendocrine tumour.

### *Histopathology*

Initially a CT guided biopsy was done and the tissue was sent for histopathological diagnosis, which was reported as 'Highly Suspicious for Malignancy', and we had

strongly advised for immunohistochemistry for further categorization. Later, the patient underwent a distal pancreatectomy with splenectomy. Grossly the resected specimen showed multiple grey white, firm nodular lesions, resembling lymph nodes, largest measuring 5.5 x 4.5 x 3cm and smallest measuring 1.5 x 1 x 1cm, at the peripancreatic and perisplenic region. The pancreas and spleen grossly appeared unremarkable (Figure 1A).

## DISCUSSION

On histopathological examination the peripancreatic and perisplenic lymph nodes showed large cells with prominent eosinophilic inclusion like nucleoli and scattered classical Reed Sternberg like cells with few atypical mitosis (Figure 1B). The background showed numerous vague ill-defined granulomas with multinucleated giant cells and polymorphous infiltration of mature lymphocytes, macrophages, and plasma cells. Immunohistochemistry was done to further categorize the pleomorphic large cells. Histologically the sections from spleen and pancreas showed no remarkable changes.

So with the correlation of gross, microscopy and immunohistochemistry a final diagnosis of Hodgkin's lymphoma-Mixed cellularity type was reported.

Hodgkin's lymphoma involving the peripancreatic and perisplenic lymph nodes seems to have a very low incidence, and they mostly are diagnosed as Non-Hodgkin's lymphoma.[2] The cervical and supraclavicular lymph nodes are most frequently involved in Hodgkin's lymphoma and abdominal lymph nodes are usually not affected unless the cervical and mediastinal lymph nodes are involved.[3] But surprisingly in our case there were no enlargement of cervical or mediastinal lymph nodes except for the para aortic lymph nodes diagnosed radiologically

As uncommon as these malignancies are, when they are evident they contribute a serious threat in establishing a diagnosis and deciding the treatment strategy. Since in our case the diagnosis of radiology in correlation with lab investigations and CT guided biopsy without immunohistochemistry, suggested a malignant tumor at the tail of pancreas it misguided the surgeon to decide on the invasive procedure of distal pancreatectomy with splenectomy.

Over the past decade, many case reports have been published emphasising the difficulty encountered in differentiating malignancy of pancreas from the lymphoma involving the regional lymph nodes of pancreas and spleen clinically and radiologically.

Marked lymphadenopathy around pancreas and spleen due to lymphoma can mimic carcinoma of the pancreas on ultrasonography which was seen in our present case.[4] Jayanthi et al compared 12 cases of abdominal peripancreatic lymphoma and 21 cases of pancreatic carcinoma on ultrasound . He used colour Doppler to differentiate between the two based on the turbulent flow of blood vessels. But both ultrasound and colour Doppler could not effectively differentiate these two pathologies. Henceforth he had concluded that CT guided biopsy from the representative area is mandatory.[21]

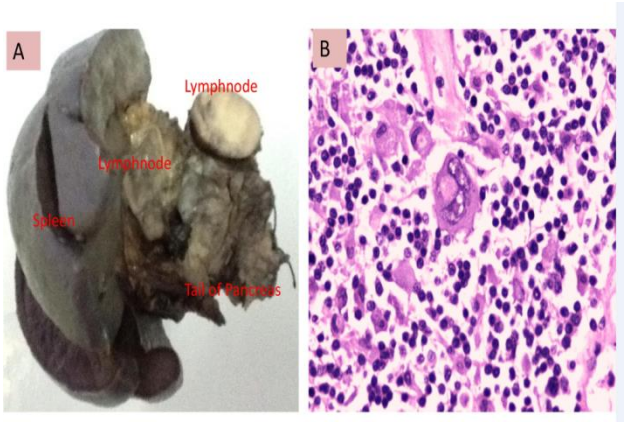


**Figure 1 A: Gross distal pancreatectomy and splenectomy specimen B. Classical RS cells (H&E 400X).**

Scheifke et al reported a case with a lesion of low echogenicity in the pancreatic head in ultrasonography but CT suggested no lesion in the pancreas. On explorative laparotomy with biopsy of pancreas revealed non-Hodgkin's lymphoma.[5] This clearly shows that histopathological examination is very much necessary for the conclusive diagnosis in differentiating pancreatic carcinoma and lymphoma than imaging techniques. The major dramatic difference in prognosis and treatment between malignancy and lymphoma makes it important to have a correct diagnosis.

At present more than 75% of the Hodgkin lymphoma`s treatment is non-surgical and cured with radiotherapy and/or chemotherapy and has a better prognosis than adenocarcinoma.[6] So histological examination with immunohistochemistry is therefore very essential today to confirm the diagnosis .One can thereby avoid major surgeries.

## CONCLUSION

From our case it is highlighted that lymphomas should be always kept in mind as a differential diagnosis before opting for surgery. CT guided biopsy with histopathological examination of focal masses near the pancreas and spleen is therefore mandatory to confirm the diagnosis than imaging techniques. The application of immunohistochemistry plays a major role in distinguishing the differential diagnosis and it`s role should be stressed on to the physicians and surgeons to reasonably make a decision on treatment strategies.

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