



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.2594043>Available online at: <http://www.iajps.com>

Research Article

**A RESEARCH STUDY ON THE HCV PATIENTS DIAGNOSED  
WITH SPLENIC LYMPHOMA: A KIND OF NON-HODGKIN'S  
LYMPHOMA**<sup>1</sup>Dr Anam Riaz, <sup>2</sup>Dr Mehwish Iqbal, <sup>3</sup>Ayesha Yousaf<sup>1</sup>THQ Hospital Shahkot, <sup>2</sup>Indus Hospital Recep Tayyab Urdagan Muzafarghar, <sup>3</sup>THQ Hospital Samundari

Article Received: December 2018

Accepted: February 2019

Published: March 2019

**Abstract:**

*A kind of Non-Hodgkin's Lymphoma, Splenic Lymphoma is a marginal zone lymphoma (MZL's). Lymphocytic tumour of marginal zone of spleen marks the identification of Splenic Lymphoma. Splenic hilar lymph nodes may also be included. Due to this, abnormal B Lymphocytes in the blood may get disturbed. This case report is about a male of 38 years of age with known HCV hospitalized at Services Hospital, Lahore in September 2017. He was found with an abnormal mass in the left hypochondriac region and discomfort in left hypochondrium. The patient was clinically examined and detected with a splenic hematoma. After further inspections, splenic hematoma was converted to be splenic lymphoma. The patient was treated for this disorder.*

**Keywords:** *Splenic Marginal Zone Lymphoma (SMZL), Non-Hodgkin, Lymphoma, Splenic, Spleen and Hypochondriac.*

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Please cite this article in press Anam Riaz et al., *A Research Study On The Hcv Patients Diagnosed With Splenic Lymphoma: A Kind Of Non-Hodgkin's Lymphoma.*, *Indo Am. J. P. Sci.*, 2019; 06(03).

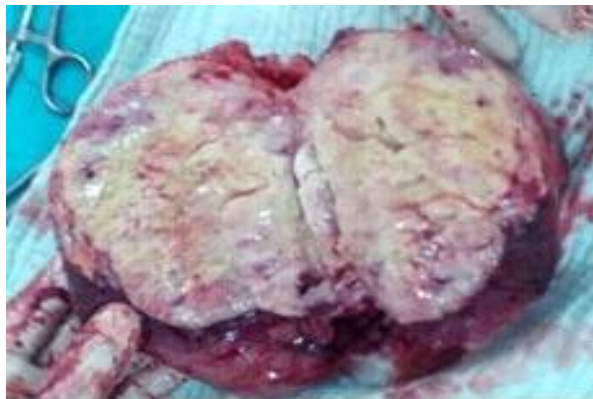
**INTRODUCTION:**

Lymphoma is the most frequently occurring malignancy [1]. In the WHO Classification, the disease of Splenic Marginal Zone Lymphoma (SMZL) with or without villous lymphocytes was currently introduced as a specific pathological entity. The disorder of SMZL is considered as an apathetic and dispersed at identification. Through morphological and immunophenotypic features of circulating neoplastic lymphocytes and by histopathological examination of surgically removed spleens, the SMZL is exactly identified [2]. The more common observation was made for lymphocytosis and cytopenia. Based on the WHO classification, Hodgkin's and Non-Hodgkin's are two divisions of lymphomas. Non-Hodgkin's lymphomas are found as lymphadenopathy of different sites like spleen in axilla, nest and grain. It usually starts in the late 40s. One division of Non-Hodgkin's lymphomas are marginal zone lymphomas. It is a tumor-like appearance in secondary lymph node follicles. Marginal zone of the node marks the start of this lymphomas. It damages the surrounding areas of node afterwards [2]. While pulp of spleen is the site of splenic marginal zone lymphomas. Afterwards, it may include irregularity of red pulp. Particular B lymphocyte in the spleen is possibly activated by a specific glycoprotein of the Hepatitis C virus. Tumour may also get started from the site of all the blood cancers. Lymphomas makes 55.6%, whereof all cancers, lymphomas are 5.3% of all the MZLs, 20% is shown by SMZLs and of all Non-Hodgkin's lymphomas, 5.17% is shown by marginal zone lymphomas [3]. The incidence of this malignant situation is found in one in every fifty people as suggested by WHO. Males are more vulnerable to it and it is found mostly after fifty years of age. 763 people were SMZLs out of 116411 people of Non-Hodgkin's lymphoma, according to research from surveillance, epidemiology and end result (SEER) program in the USA. The malignancy of spleen may be induced by reduced immunity condition like AIDS, Radiation therapy, chemotherapy HCV infection, alkylating agents and many chemicals like PCB (polychlorinated biphenyl). However, specific causes are unknown [4]. The objective of this research was to notify healthcare professionals and surgeons that while managing a person of HCV

positive having mass in the abdomen, they should consider this situation as well [4].

**CASE REPORT:**

This case was about a male of 38 years of age. The weight of the patient was 68 kilograms and height was 5 feet nine inches. He was a resident of Faisalabad and by profession a labourer. The patient was suffering from a feeling of a lump in the left lumbar region and left hypochondrium region. He has been going through this discomfort for a period of three months. The pain was not severe but with cough, it increased. Weight loss, night sweats and vomiting were not observed in patients. The presence of the same disease was not detected in any member of the patient's family. The patient was not found with diabetes mellitus, hypertension or any other disorder. The patient was examined and there found no anaemia, pallor, cyanosis and lymph node growth all over the body. It was found that the size of the spleen was moderately enlarged in size and tenderness in left hypochondrium. The chromatographic technique was carried out and it was found that the patient had been positive for HCV for the last eight months. On PCR and ELISA, the patient was confirmed positive at the time of admission. The patient was confirmed positive at the time of admission. The patient was also identified with splenic hepatoma. Late on, lymphoma was detected on ultrasonography (Figure – I). The size of the lymphoma was 9.1 x 9.0 centimetres. In spleen there observed localized mass on CT scan of abdomen and pelvis. Total leucocytes count of the patient was 11500/cm<sup>2</sup> and haemoglobin was 12.8 g/dl. On CT and ultrasonography, other viscera of abdomen and pelvis were in common shape. No remarkable hepatic irregularity was observed on tests of activated partial thromboplastin time, prothrombin time and other liver function. Splenectomy was carried out. Splenic Marginal Zone Lymphoma was reported when the specimen was carried in a laboratory for histopathology (Figure – II). After one week, the patient was discharged. He was given with meningococcal, Hib and pneumococcal vaccines. For results of post-splenectomy, suggestions were given to the patients.

**Figure – I:** Ultrasonographic findings of the splenic marginal zone lymphoma**Figure – II:** Gross appearance of splenic marginal zone lymphoma**DISCUSSION:**

A case of splenic lymphoma due to HCV is never frequent. Its incidence is mostly present in the age of fifty years. In our research, we presented a case of 38 years of age. Such cases are not commonly found. The family of this patient was not at the risk of SMZL. The presence of irregular basophilic villous shaped cells was not reported in blood. Identification is confirmed when these cells are found in the peripheral blood. For more than three months, the patient was found positive for HCV. In another research, it was observed that the establishment of lymphoma in spleen and other regions is affected by HCV. In the precursor B-Cell, there is an association of identical glycoprotein (E2) with CD-81 receptor. It brings a proliferation of B-Cells in it. Bone marrow biopsy is carried out for the identification and confirmation of spleen biopsy, bone marrow biopsy was found very effective in another research [5].

For those patients who have a continuous disease or who were not willing for surgery, chemotherapy is carried out. The management of splenic marginal zone lymphoma was advanced with the discovery of rituximab [6]. All the patients were provided with

rituximab. The age, gender and comorbidity of the patient were not considered. It is illustrated by many studies that as compared to splenectomy, rituximab proved more effective. The laparoscopic technique was employed for those cases where septectomy was not possible. As compared with other open techniques, Laparoscopic splenectomy is more advanced [7]. On epidemiology, research was conducted in the USA, in this research after the management of disease the survival rate was five percent. In the current study, the median survival rate of the patients is 5 – 10 years. As compared to the other variants of marginal zone lymphomas like mucosa-associated lymphoid tissue (MALT) and nodal marginal zone lymphoma (NMZL), the survival rate of splenic zone lymphomas was less. These have longer survival rates and have a better prognosis.

**CONCLUSION:**

It is concluded by the outcomes that there should be a difference in the identification of splenic marginal zone lymphoma when the case having mass in left hypochondrium is being managed.

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