

PRIMARY SPLENIC LYMPHOMA IN BILHARZIAL SPLENOMEGALY

(CLINICO-PATHOLOGICAL STUDY)

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INTRODUCTION

Malignant lymphoma is by far the most common malignant tumour involving the spleen (Long and Aisenberg, 1974).

Although usually affected as a part of generalised process, in some cases the spleen represents the only detectable site of the disease. Splenic involvement by such disease may present as an asymptomatic splenomegaly or result in a picture of hypersplenism (Vardimen et al., 1975 and Glees et al., 1977).

In this work, the initial diagnosis of splenic lymphoma was made pathologically at splenectomy in a group of bilharzial patients trying to detect the frequency of such primary splenic lymphoma in bilharzial splenomegaly and to discuss the different pathological

findings. The clinical features noted prior to splenectomy were reviewed.

MATERIAL AND METHODS

From 1986-1988 at Mansoura University Hospital, splenectomies and devascularisation of the gastro-oesophageal regions were performed on 200 bilharzial patients of both sex their ages ranged from 20-56 years with an average of 42 years. All patients were subjected before operation to thorough clinical examination and laboratory investigations including abdominal sonograms and barium contrast roentgenogram of the upper gastrointestinal tract.

All the removed spleens were subjected to gross examination in the fresh state. Then were carefully exam-

a- Four cases show follicular lymphomatous distribution throughout the organ, correlating well with the gross miliary appearance. These follicles are scattered randomly distributed and were not related to the malpighian follicles or small bloodvessels. Such follicles are produced by progressive proliferation of the splenic lymphoid tissue.

The 3 cases (2.3%)

Histopathological study of the removed spleens revealed 12 cases of splenic lymphoma. The cases of post-operative radiological investigations disclosed 7 cases in whom intra-abdominal swellings were found, suspecting that the spleens were secondarily involved by the disease. In the remaining 5 cases, no positive radiological findings were associated, denoting that the spleens were often primary involved by the disease.

C- The cut surfaces revealed homogeneous pattern in 196 cases, while in the remaining four cases they present a miliary pattern of splenic enlargement.

an avoid outline.

RESULTS

The patients having lymphomatous spleens were further subjected to C.T. scan for proper localization of such lymphomas to perform the possible ideal management and close follow

ined histopathologically after Hx. & E.

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throughout the splenic substance producing complete upset of the normal lymphoid architecture of the spleen. They are rounded or oval and generally uniform. Occasionally they vary in size and shape in the same case. They appear packed closely together with little intervening compressed lymphoid tissue or else irregular and more sparsely distributed and separated by wider zone of lymphoid tissue. They show the absence of macrophages within them. The cells in the nodules are mostly mature lymphocytes with occasional less mature cells and a few larger histiocytoid cells. This form of the disease corresponds best to the classical "Well Differentiated Lymphocytic Follicular Lymphoma" (Fig. 1 & 2) b- The remaining case, presents histopathologically loss of normal splenic architecture with diffuse replacement by monotonous small cells exhibiting morphological characteristics similar to those of ripe small lymphocytes. They show distinct rounded or oval outlines with a thin rim of amphophilic cytoplasm, surrounding a deeply stained spherical nucleus. Occasionally there is a condensation of chromatin at the edge of the nucleus. Mitosis is scanty. Such diffuse nature of the lesion can pass with the gross appearance of the fresh

specimen of a being a homogenous splenomegaly and this form of the disease corresponds with "Well Differentiated Lymphocytic Lymphoma" (Fig.3).

DISCUSSION

Although the spleen is commonly affected eventually in the course of lymphoma, yet the diagnosis of lymphoma usually is made by means of biopsy of a peripheral lymph node. Less frequently, surgical removal of extranodal lesion reveals the diagnosis.

Since bilharzial hepatosplenic enlargement is a common disease in Egypt, and all the performed splenectomies were aimed at ameliorating hypersplenic complications, the discovery of splenic lymphoma was accidentally.

Now two items in this work were impressive :-

The first one was the high frequency of primary splenic lymphoma (2.5%), compared to Ahmann et al., (1966) who reported that such disease constitutes less than 1% and Morgenstern et al., (1985) who claimed that the spleen is a rare site for primary lymphoma. Although the microscopic

evaluation of such primary splenic lymphoma or is it a matter of association? May splenic lymphoma or is it a matter of association?

- Is the hypersplenic complications of biliary fistulas are also responsible for the production of some variety of lymphomatous alterations?

Ineeded these questions need further work.

The areas of peripheral infarction can be related to the relative ischemia associated with such marked splenic

enlargement while the thickened capillary structure can be conceivable after the repeated interstitial splenitis are haemorrhage and these findings are usual in biliary splenic enlargements.

Because most patients received post-operative radiation therapy, alkylating agent or both, the benefit of surgical therapy alone could not be evaluated.

SUMMARY

Primary splenic lymphoma is an uncommon disease, diagnosed pathologically during examination of the spleens removed in the course of treatment of hepatosplenic biliary fistulas. 5 cases were reported (2.5%). All of them were non Hodgkin's lympho-

- Is the hypersplenic complication developed.

of biliary tracts are incriminated as a factor in the production of such pri-

From this work, these questions may spleen myphonia:

b- Most of the cases (80%) were follicular lymphocytic lymphoma, a point that contradict the finding of Ahmann et al., (1966) who considered that such nodular variety of lymphoma forms about 30% of non Hodgkin's pri-

a. There was no Hodgkin's lympho-
ma in this study, a point differing from
that discovered by Hermann et al.
(1968) who reported that Hodgkin lym-
phoma constitutes at least 25% of the

Still the second impressive item in
gaily.

evaluation of such primary splenic lymphoma was corresponding with the gross finding of being a follicular lymphoma in the milia lesions and diffuse lymphocytic lymphoma in the homogeneous lesion, these findings were accepted by Rappaport and associates. (1956) and denied by Morgenstern et al., (1985) who claimed that the nodular lymphoma is usually associated with a homogenous spleenome-

ma. 4 cases were in the form of well differentiated lymphocytic follicular lymphoma and one case was well dif-

ferentiated lymphocytic lymphoma of the diffuse variety

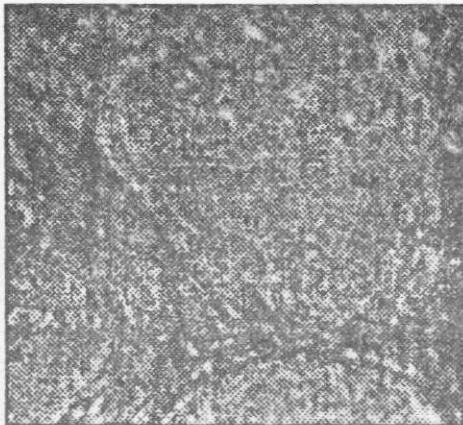


Fig. 1 : Splenic lymphoma, well differentiated follicular lymphocytic variety. Hx. & E. X 100.

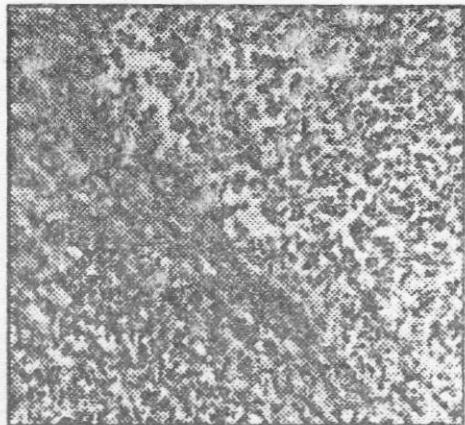


Fig. 2 : Splenic lymphoma, well differentiated follicular lymphocytic variety. Hx. & E. X 200.

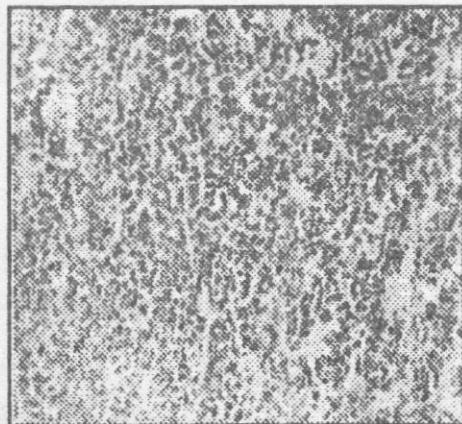


Fig. 3 : Splenic lymphoma, well differentiated diffuse lymphocytic variety. Hx. & E. X 200.

REFERENCES

- Ahmann, D.; Klein, J.; M.; Hart-
hemann, H.; Deinavicius, R.; and
son, E. G. and Bayne,
Hawk, W. (1986) :
Annals of Surgery 5 :
896.
:461.
DeVita, V. T.; Jaffee, E. S. and Hell-
man, S. (1985) : In Devi-
ta, V. T., Hellman, S. and
Rosenberg, S. A. (Eds).
Cancer, principles and
practice of oncology 2nd.,
J. B. Lippincott Company,
Philadelphia, London,
Mexico, New York, St.
Louis and Sydney P.
1923.
Varolmen, J. W.; Byrne, C. E. and
Rappaport, H. (1975) :
Cancer, 36 : 419.
Hicks, E. (1956) : Can-
cer, 9 : 792.
Rappaport, H.; Winter, W. and
J. Surg. 9, 468-476.
Morgenstern, L.; Rosenberg, J. and
Geller, S. (1985) : World
Meeting, 1985.
Rosenberg, S. A. (Eds).
Cancer, principles and
practice of oncology 2nd.,
J. B. Lippincott Company,
Philadelphia, London,
Mexico, New York, St.
Louis and Sydney P.
1923.
Glenn, J.; Taylor, K.; Gazette, J. and
Mc-Cready, V. (1977) :
Cancer, 36 : 419.