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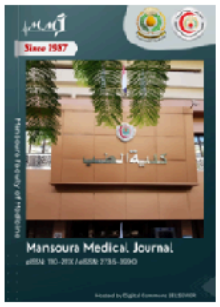

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PRIMARY SPLENIC LYMPHOMA IN BILHARZIAL SPLENOMEGALY (CLINICO-PATHOLOGICAL STUDY)

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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-

ined histopathologically after HX. & E. stain.

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 up.

RESULTS

A- CLINICAL RESULTS :-

1- All patients had past history of bilharziasis, nearly all of them were suffering from malaise, anorexia, weakness, irregular fever, night sweat, and hepatosplenomegaly.

2- Haematological findings were in the form of pancytopenia, with elevated sedimentation rate.

B- PATHOLOGICAL RESULTS :-

1- Grossly, all the spleens had been examined initially in the fresh state.

a- The capsular surfaces were nearly thikened in all with a peripheral areas of infarction.

b- The splenic enlargement were in all generalized producing an ovoid outline.

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

2- Histopathological study of the removed spleens revealed 12 cases of splenic lymphoma. The post-operative radiological investigations disclosed 7 cases in whom intra-abdominal swellings were found, suspecting that the spleens were secondary 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.

The 5 cases (2.5%) were histopathologically as follow :-

a- Four cases show follicular lymphomatous distribution throughout the organ, correlating well with the gross miliary appearnce. These follicles appeared 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

throughout the splenic substance producing complete upset of the normal lymphoid architecture of the spleen. They are rounded or oval and generaly 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 irregulary and more sparsly 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 occasionl less mature cells and a few larger histocytoid 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 apearance 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 eventuallyin 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 was corresponding with the gross finding of being a follicular lymphoma in the miliary lesions and diffuse lymphocytic lymphoma in the homogenous 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 splenomegaly.

Still the second impressive item in which :

a- There was no Hodgkin's lymphoma in this study, a point differing from that discovered by Herman et al., (1968) who reported that Hodgkin lymphoma constitutes at least 25% of the primary splenic lymphoma.

b- Most of the cases (80%) were follicular lymphocytic lymohoma, 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 primary splenic lymphoma.

From this work, these questions develop.

- Is the hypersplenic complication of bilharziasis are incriminated as a factor in the production of such primary splenic lymphoma or is it a matter of association?

- Is the hypersplenic complications of bilharziasis are also responsible for the production of some variety of lymphomatous affections?

Indeed 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 capsular structure can be conceivable after the repeated interstitial splenic haemorrhage and these findings are usual in bilharzial splenic enlargement

Because most patients received post-operative radiation therapy, alkylating agent or both, the benifit 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 bilharziasis. 5 cases were reported (2.5%). All of them were non Hodgkin's lympho-

ma. 4 cases were in the from of well differentiated lymphocytic follicular lymphoma and one case was well differentiated lymphocytic lymphoma of the diffuse variety

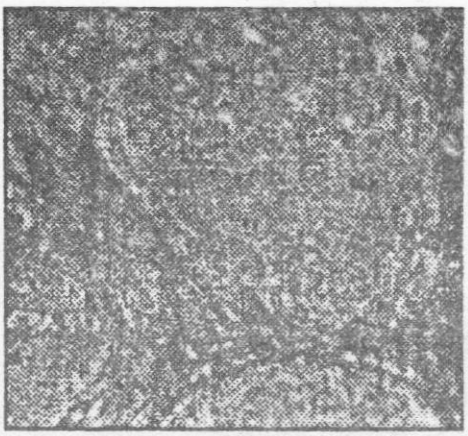

Fig. 1 : Splenic lymphoma, well differentiated follicular lymphocytic variety. Hx. & E. X 100.

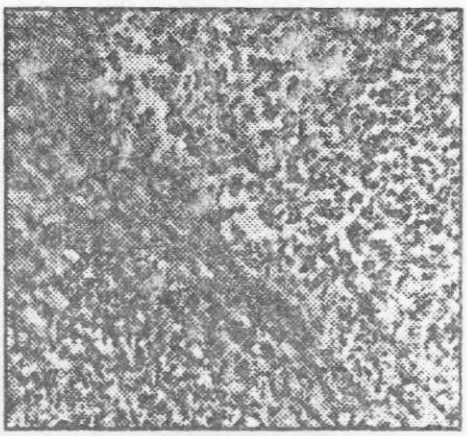

Fig. 2 : Splenic lymphoma, well differentiated follicular lymphocytic variety. Hx. & E. X 200.

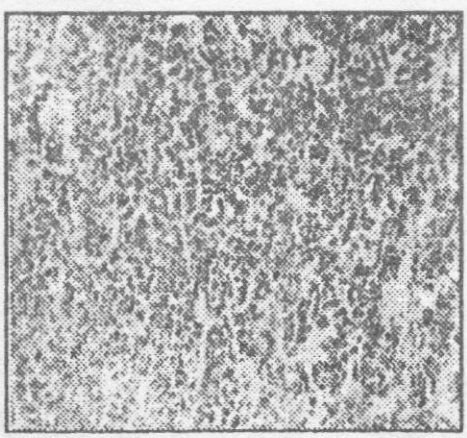

Fig. 3 : Splenic lymphoma, well differentiated diffuse lymphocytic variety. Hx. & E. X 200.

REFERENCES

Ahmann, D. L.; Kiely, J. M.; Harrison, E. G. and Bayne, W. S. (1966) : Cancer, 19 : 461.

Devita, V. T.; Jaffe, E. S. and Hellman, S. (1985) : In Devita, V. T., Hellman, S. and Rosenberg, S. A. (Eds). Cancer, principles and practice of oncology 2nd., J. B. Lippincottcompany, Philadelphia, London, Mexico, New York, St. Louis and Sydney P. 1923.

Giess, J.; Taylor, K.; Gazet, J. and Mc-Cready, V. (1977) : Clin-Radiol 28 : 233.

Hermann, R.; Dellaven, K. and Hawk, W. (1986) : Annals of Surgery 5 : 896.

Long, J. C. and Aisenberg, A. C. (1974) : Cancer 33 : 1054.

Morgenstern, L.; Rosenberg, J. and Geller, S. (1985) : World J. Surg. 9, 468-476.

Rappaport, H.; Winter, W. and Hicks, E. (1956) : Cancer, 9 : 792.

Vardimen, J. W.; Byrne, C. E. and Rappaport, H. (1975) : Cancer, 36 : 419.

الملخص العربى

ليمفوما الطحال الأولية فى تضخم الطحال الناتج عن البلهارسيا

تعتبر ليمفوما الطحال الأولية مرض غير شائع. وقد تم تشخيصه باثولوچيا أثناء فحص الطحال بعد استئصاله من مرضى تضخم الكبد والطحال الناتج عن البلهارسيا فى مستشفى المنصورة الجامعى.

وقد تم اكتشاف خمسة حالات من مجموع الحالات الكلية وعددهم ٢٠٠ حالة بنسبة (٢ر٥٪) كلهم ليمفوما غيرهودجكن وتم تصنيفهم باختلاف نوع الخلايا.