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Primitive Splenic Lymphoma: A Case Report and Review of the Literature

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ABSTRACT: Malignant lymphomas are defined as malignant proliferations developed from constituents of lymphoid organs, but also from lymphoid formations contained in most organs (liver, kidneys, digestive) without blood contamination. Lymphoma is a set of monoclonal tumor proliferations developed at the expense of lymphocytes. Lymphoma is the most common malignant tumor of the spleen, but primary lymphoma of the spleen remain an exceptional presentation.

KEYWORDS: CT, Fistula, Necrosis, Primitive Lymphoma, Spleen

INTRODUCTION

Malignant lymphomas are defined as malignant proliferations developed from constituents of lymphoid organs, but also from lymphoid formations contained in most organs (liver, kidneys, digestive) without blood contamination. Lymphoma is a set of monoclonal tumor proliferations developed at the expense of lymphocytes. Lymphoma is the most common malignant tumor of the spleen, but primary lymphoma of the spleen remain an exceptional presentation. Abdominopelvic locations mainly concern non-Hodgkin's malignant lymphomas, since rarely patients with Hodgkin's disease have subdiaphragmatic involvement, and most often it is stage III or IV. In recent years, developments have certainly concerned histo-immunochemical characterizations of tumors and therapeutic progress. Imaging, especially CT scans, is involved in all stages of the disease: detection, diagnosis, pre-treatment assessment, post-treatment monitoring and reassessment.

CASE REPORT

66-year-old patient with a history long term fever, progressive asthenia as well as an important weight loss who had consulted for abdominal pain following maelena episodes. Abdominal palpation found generalized abdominal defense to maximum at the epigastric level with and important splenomegaly. The digital rectal examination had caused pain in Douglas's pouch as well as maelena. The physical examination found the following: Respiratory rate: 44 breaths per minute Pulsed oximetry: 90% with 10 liters of oxygen. Heart rate: 176 bpm. Blood pressure: 60/30 mm Hg. Glascow score: 10. Fever: 39,5 C.A blood analysis was done showing an anemia 5 g/dL, leukocytosis 30000element/mm3 and an elevated CRP at 200.Contrast-enhanced abdominal CT revealed a necrotic infiltrating spleno-gastric mass with. There was no evidence of hepatic, splenic, genitor-urinary or bone trauma.

Endoscopic exploration , revealeda fistulous tract with perilesional ulcerative lesions in the posterior aspect of the stomach, associated with the presence of necrotic debris and endoluminal hemorrhage. The patient was transferred to internal medicine for further exploration.Following the admission, our patient underwent a splenic biopsy ; in which the histopathologic analysis revealed a non-Hodgkin primitive splenic lymphoma. The evolution of the patient was marked, with a transfer five days after to the intensive care unit due to a septic shock, and a death announcement 48 hours after.

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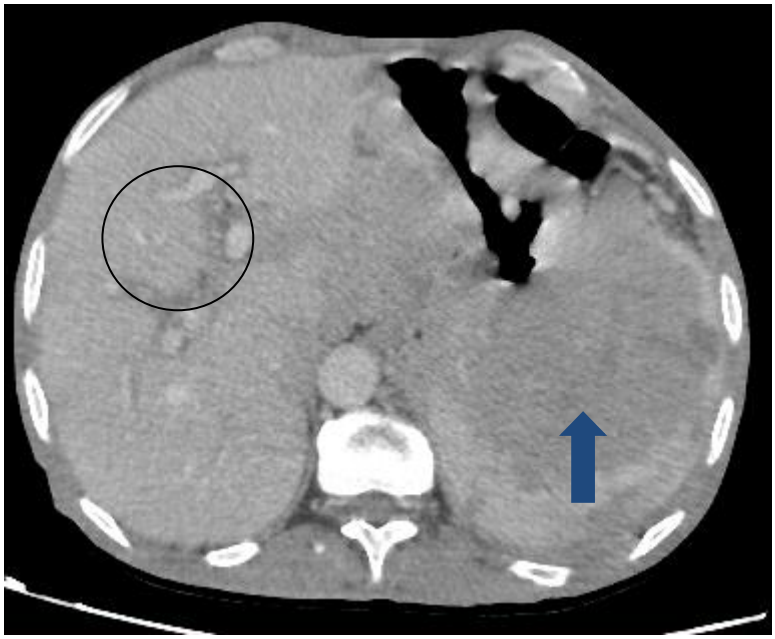

Figure 1 : Axial view of a contrast-enhanced CT in portal phase: spleno gastric fistula complicating a necrotic mass

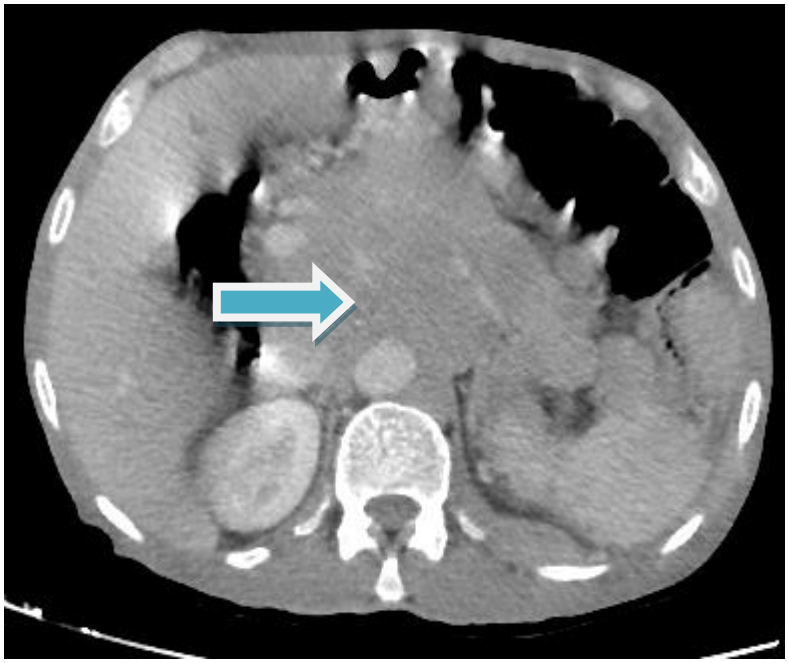

Figure 2: Axial view of a contrast-enhanced CT in portal phase: retroperitoneal adenopathy

DISCUSSION

Malignant lymphomas can be divided into two groups: non-Hodgkin's malignant lymphomas and Hodgkin lymphomas. Non-Hodgkin's malignant lymphomas have a frequency that increases steadily with age, averaging at diagnosis at age 55. The sex ratio is four men for a woman. Malignant lymphomas are in fact a group of malignant disorders of the lymphoid system that are extremely variable, both in terms of progression, treatment and prognosis.

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Clinically, the presentation of non hogkin lymphoma is extremely variable. Usually, it is physical signs: fever, anemia, asthenia, sweating, weight loss.

Other presentations are also possible depending on the primary site affected: digestive manifestations, hepatic abnormalities, pulmonary or respiratory signs, etc. Haemorrhages are the most frequent complication. Finally, a palpable mass or multiple peripheral lymphadenopathy are also ways of revealing the disease.

The diagnosis is suggested by the appearance of a lymph node or extranodal picture. When the spleen is the beginning organ for lymphoma, it may complicate by a spontaneous rupture. The diagnosis and classification of NHL are based on biopsy samples, with pathological examination of an invaded node or an extranodal location.

Even if surgical samples of a whole lymph node are preferable, biopsies under CT or under ultrasound often allow an accurate diagnosis. As there are often lymphoid reactions around affected nodes, it is desirable to take biopsies from two different places within a node or mass, or to take samples from two different anatomical regions. Primary spleen lymphoma is an exceptional disease. In splenic lymphoma non-Hodgkin's, the problem of splenic detection has not yet been resolved. The criterion for the size of the spleen is not specific.

In conventional imaging, there is a wide range in the appearance of lesions regardless of the type of lymphoma: homogeneous splenomegaly, focal solitary mass, multifocal lesions, diffuse patchy infiltration.

In the case of visible nodules, they usually appear round, well limited, homogeneous, hypoechoic, or even pseudocystic anechoic anechoic, but without posterior reinforcement of the bundle on ultrasound. They are hypodense but not liquid on CT, little enhanced after injection. The demonstration of these nodules requires a sufficiently late acquisition phase on CT; too early arterialphase could mask them.

Diffuse infiltration is not necessarily accompanied by splenomegaly on the one hand, and on the other hand, moderate "reactive" splenomegaly without tumor infiltration can be observed. Marked splenomegaly is, however, most often the indication of diffuse tumor infiltration. Sometimes these are infiltrating masses occupying the entire spleen or exceeding its limits .Differential diagnosis includes are sarcoidosis, metastases, fungal infections and granulomatosis.

CONCLUSION

Malignant lymphomas have benefited from significant progress thanks to a better histological evaluation. Medical imaging has largely contributed to these advances by increasingly precise morphological information it provides. Apart from biological, medullary and histological abnormalities, the prognosis of the disease also depends on the size of the lymph node sites affected, as well as any visceral extensions. The size of the lesions also plays a role in this prognosis. All of these morphological abnormalities can be detected by medical imaging. For this assessment, the most effective medical imaging procedure is CT scan, as it allows a comprehensive study of all the sites that can be affected by malignant lymphomas, and in particular the thorax. As the only element to confirm lymph node involvement is its increase in size, the theoretical limit of this technique concerns lymph nodes that are invaded but of normal size.

REFERENCES

1. Kattepur, A. K., Rohith, S., Shivaswamy, B. S., Babu, R., & Santhosh, C. S. (2013). Primary splenic lymphoma: a case report. Indian journal of surgical oncology, 4(3), 287–290. https://doi.org/10.1007/s13193-013-0243-x
2. Li M, Zhang L, Wu N, Huang W, Lv N. Imaging findings of primary splenic lymphoma: a review of 17 cases in which diagnosis was made at splenectomy. PLoS One. 2013 Nov 21;8(11):e80264. doi: 10.1371/journal.pone.0080264. PMID: 24278265; PMCID: PMC3837000.
3. Dachman AH, Buck JL, Krishnan J, Aguilera NS, Buetow PC. Primary non-Hodgkin's splenic lymphoma. ClinRadiol. 1998 Feb;53(2):137-42. doi: 10.1016/s0009-9260(98)80061-5. PMID: 9502091.
4. BRiera-Knorrenschild J, Görg C, Dennhardt N, Restrepo I, Neubauer A. Der fokalechoreiche Milzbefallbeimalignem Lymphom: eindiagnostisches Problem [Focal echogenic splenic involvement in malignant lymphoma: a diagnostic problem]. Ultraschall Med. 2000 Feb;21(1):3-7. German. doi: 10.1055/s-2000-8642. PMID: 10746277.
5. Goerg C, Schwerk WB, Goerg K, Havemann K. Sonographic patterns of the affected spleen in malignant lymphoma. J Clin Ultrasound. 1990 Sep;18(7):569-74. doi: 10.1002/jcu.1870180708. PMID: 2170456.

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6. Lee JE, Cho JS, Shin KS, Kim SS, You SK, Park JW, Shin HS, Yoon YC. Diffuse Infiltrative Splenic Lymphoma: Diagnostic Efficacy of Arterial-Phase CT. Korean J Radiol. 2016 Sep-Oct;17(5):734-41. doi: 10.3348/kjr.2016.17.5.734. Epub 2016 Aug 23. PMID: 27587962; PMCID: PMC5007400.
7. Jang S, Kim JH, Hur BY, Ahn SJ, Joo I, Kim MJ, Han JK. Role of CT in Differentiating Malignant Focal Splenic Lesions. Korean J Radiol. 2018 Sep-Oct;19(5):930-937. doi: 10.3348/kjr.2018.19.5.930. Epub 2018 Aug 6. PMID: 30174483; PMCID: PMC6082758.Fröhlich, B. and Plate, J. 2000. The cubic mouse: a new device for three-dimensional input. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems.

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