



Unexpected consequence of splenectomy in composite lymphoma. The abscopal effect

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A twenty-two year old man was admitted to our department because of fever and weight loss. At clinical evaluation hepatosplenomegaly was present whilst no superficial lymphadenopathy was found. Abdominal ultrasound and CT scan (Figure 1) confirmed the organ enlargement and revealed diffuse nodular involvement of both liver and spleen. Routine laboratory tests showed only elevated ferritin (7,000 ng/mL) and LDH (1,110 U/L), values which were consistent with a suspected lymphoma.

A fine-needle liver biopsy was performed without conclusive results with regards to this possible pathology and therefore the patient underwent laparotomy with consequent splenectomy and liver nodulectomy. Histologic findings confirmed large B-cell non-Hodgkin's lymphoma involving both organs, and co-existing Hodgkin's disease, nodular sclerosis subtype. The definitive diagnosis of *composite lymphoma, stage IV B*, was finally established.

Two weeks later a spontaneous reduction of the liver – near to normal size – was observed both at clinical and instrumental evaluation; CT scan (Figure 2) also documented a dramatic reduction of liver involvement by the lymphoproliferative disease. Concomitantly, ferritin and LDH tests approached normal.

Splenectomy is performed for diagnostic and therapeutic purposes; in the latter case it is considered an effective treatment in two B-cell leukemias, hairy cell leukemia and prolymphocytic leukemia and for the unusual splenic marginal zone lymphoma. Splenectomy in these diseases is sometimes followed by significant tumor regression in the original sites of disease. Similar regression of systemic disease was first noted after splenic irradiation in some lymphoproliferative diseases, especially chronic lymphocytic leukemia¹ and more in general the remote effect of irradiation on malignancy outside the radiation field was described in the older literature.²⁻⁴ The phenomenon was named the *abscopal effect*, from the Latin *ab* (position away from) and *scopus* (mark or target). The mechanism is unexplained, although a variety of biologic events can be supposed.

References

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Figure 1. Abdomen CT scan at staging: massive nodular hepatic and splenic involvement.

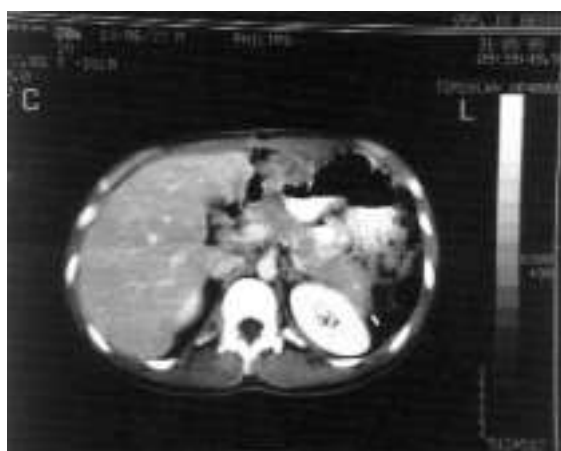


Figure 2. CT scan after splenectomy: favorable evolution of hepatic disease.

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