



Rapid Spontaneous Regression of Diffuse Large B-Cell Lymphoma after Fine Needle Aspiration Cytology: A Case Report

Adel El-Badrawy^{1*}, Reham Abd El-Wahab¹, Ziad Emarah² and Noha Eisa³

¹Department of Radiology, Mansoura University, Egypt

²Department of Medical Oncology, Oncology Center- Mansoura University, Egypt

³Department of Clinical Hematology, Mansoura University, Egypt

Editorial

Spontaneous Regression (SR) of lymphoma is a rare phenomenon. While the precise mechanism of SR remains unknown, apoptosis may be associated with its process. Here, we present a case of a 45-year-old woman was admitted to our hospital with jaundice. Ultrasonography revealed porta hepatitis mass with dilated intra-hepatic bile ducts. Patient underwent percutaneous transhepatic biliary drainage. Multi-detector computed tomography of showed porta hepatitis mass compressing extra-hepatic duct with dilated intra-hepatic bile ducts as well as splenic focal lesion (Figure 1). Fine Needle Aspiration Cytology (FNAC) was done and revealed lymphocytic smear with advised another biopsy. US guided FNAC was taken after 17 days. During US guided technique; marked regression of porta hepatitis mass was detected. So, 2nd biopsy was taken from splenic focal lesion. Post-contrast MDCT scan was done and revealed marked decrease in size of porta hepatitis mass after 18 days (Figure 2). Final pathology revealed non-Hodgkin lymphoma (diffuse large B-cell type).

The mechanism of spontaneous regression of malignant tumor is unknown, however, several of these regressions occurred after invasive procedures such as biopsies, or after complications with bacterial infection; some may have activated immune reactions, which might have contributed to the resolution of the disease [1].

Abe *et al.* [2] reviewed 15 cases of Spontaneous Regression (SR) in Non-Hodgkin Lymphoma

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*Correspondence:

Adel El-Badrawy, Department of Radiology, Mansoura University, 1 Omar Ben Abdel-Aziz From Gehan Street – Mansoura, Egypt, Tel: 002-0100-5785751, 002-050-2234683; Fax: 002-050-2315280; E-mail: adelelbadrawy@hotmail.com

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Figure 1: Initial post-contrast MDCT scan of the abdomen (A-C) done on August 20, 2017 reveal porta hepatitis mass with intra-hepatic bile duct dilatation. Hyper dense shadow in image C revealed inner tip of bile drainage catheter. Evidence of splenic focal lesion.



Figure 2: Post-contrast MDCT scan done on September 7, 2017 (after 18 days) reveal marked regression of the porta hepatitis mass with no change as regard splenic focal lesion.

(NHL) and reported that 3 cases involved were Diffuse Large B Cell Lymphoma (DLBCL) type. Most of SR cases are localized tumors stage I or IE that has undergone invasive procedure like excision biopsy and have been associated with a massive infiltration of T cells in the residual tissue. Spontaneous regression of pulmonary Mucosa-Associated Lymphoid Tissue (MALT) lymphoma was found after open lung biopsy [3]. Another spontaneous regression of orbital Non-Hodgkin lymphoma, diffuse large B cell type was shown after biopsy [4].

In the present case, there was rapid diffuse large B-cell lymphoma regression following fine needle aspiration cytology. Stimulation by fine needle biopsy may have directly triggered a regional immune reaction, which could have led to tumor remission. It has been hypothesized that FNAC may initiate immunologic mechanisms that may be involved in the regression. Immunological evaluation of patient with diffuse large B-cell lymphoma must be assessed before and after biopsy to detected immune-directed therapies. More reports of such cases should help to clarify the mechanisms, contribute to a further understanding of this phenomenon and may lead to a new treatment strategy for diffuse large B-cell lymphoma.

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