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Case Report

Lymphoma in a Crohn's Disease Patient Treated with Azathioprine and Infliximab

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Abstract

In patients with inflammatory bowel disease, malignancies rank second behind cardiovascular diseases as the leading cause of death (IBD). In fact, people with IBD are more likely to develop a variety of extraintestinal malignancies, particularly lymphomas, the majority of which are non-Hodgkin lymphomas. Hodgkin lymphoma-type is a rather uncommon lymphoproliferative condition; to date, there have been just a few incidences of Hodgkin lymphoma (HL) in IBD patients. Here we report a case of Hodgkin lymphoma developing in a patient with Crohn's disease being treated with both azathioprine and infliximab.

Case Summary

A 52 years old lady with Crohn's disease on azathioprine treatment has presented with a history of gradually progressive exertional dyspnoea. A physical examination confirmed the presence of fixed lymph nodes of hard consistency in the left cervical area and left axilla without evidence of any other superficial lymphadenopathy or organomegaly.

The biochemical results showed increased ESR and CRP as well as a neutrophilic leukocytosis of approximately 13,000 leukocytes per microliter. The chest X-ray showed a left mediastinal enlargement (Figure 1).

Chest Computed Tomography (Figure 2) was consistent with thoracoabdominal lymphadenopathies.

Histopathology and immunohistochemistry tests were positive for CD30 in RS-Burg- like cells giving rise to a diagnosis of atypical lymphoproliferative disease; mimicking Hodgkin's lymphoma.

PET scan demonstrated nodal assessment of glucose avid multiple pathologically enlarged variable-sized LNs

Infliximab was, then, put on hold, but the patient continued on oral pentasa and azathioprine, and was referred to Oncology.

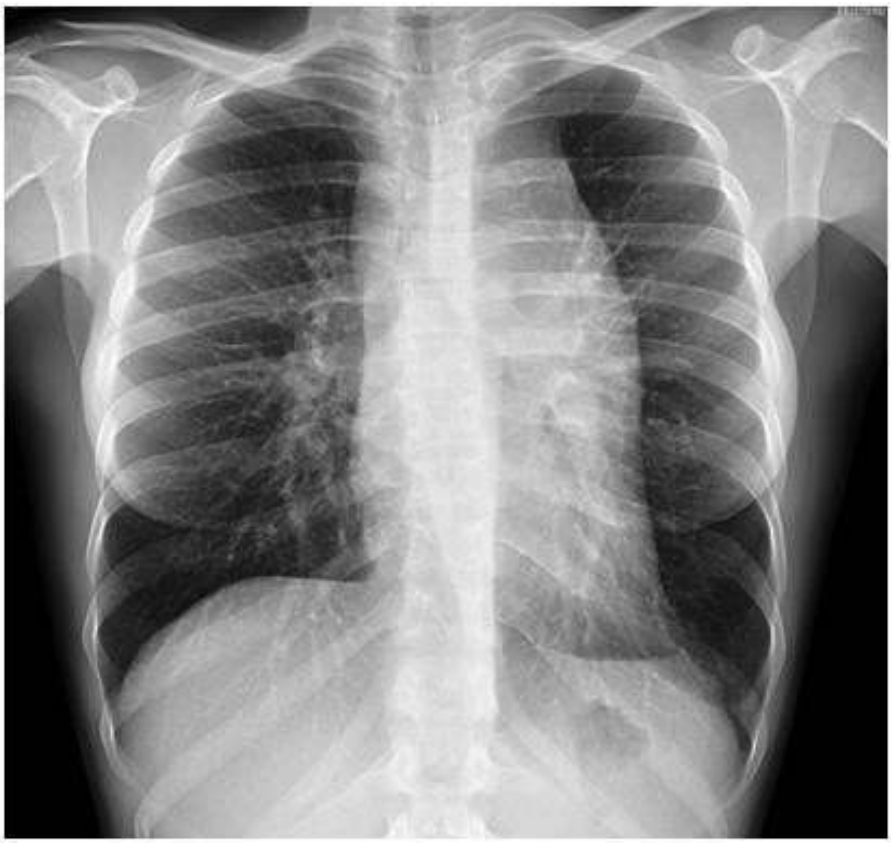

Figure 1. Chest X-ray showed a marked left mediastinal enlargement.

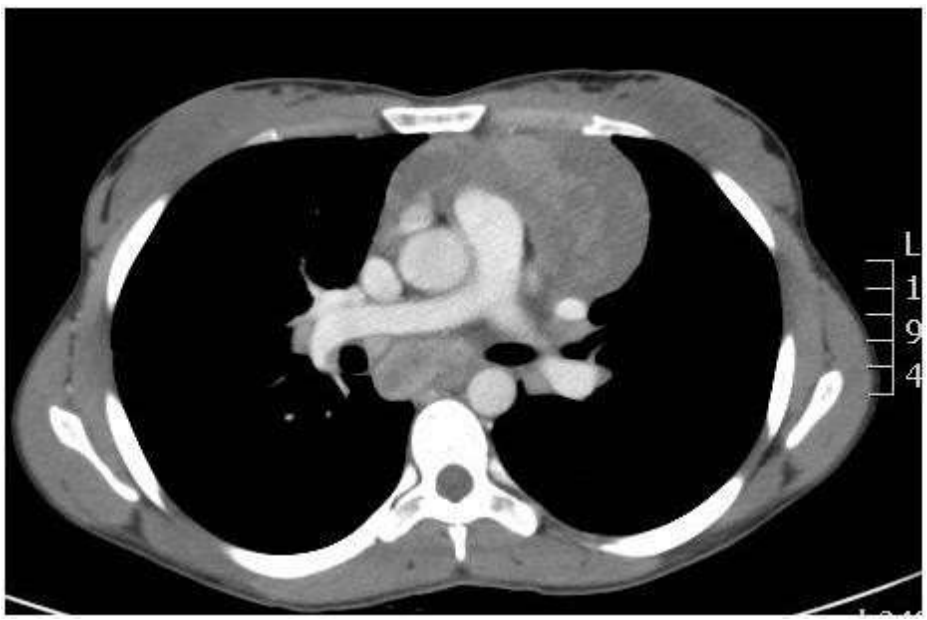

Figure 2. Chest CT scan showed enlarged nodes in the supraclavicular and cervical regions, in the upper mediastinum including paratracheal prevascular, subcarinal, bilateral lung hilum sites.

Discussion

The majority of infliximab-associated lymphomas are hepatosplenic T-cell or B-cell non-Hodgkin types. The risk of lymphoma development increases regardless of the underlying condition when infliximab is used with another immunosuppressive.

Our patient was also on azathioprine, However, a multi-center study did not show an increase in the incidence of neoplasia when compared to those who did not receive it. but the combined risk should further be explored.

Ulcerative colitis is more likely to be involved as a possible predisposing factor in the pathogenesis of HL. however; given its occurrence in literature, Crohn's Disease can infrequently be associated with extra-intestinal HL, even without immunosuppressive therapy.

Another distinguishing aspect of immunosuppression-associated lymphomas is the well-established link between many of these malignancies and EBV and CMV infections. However, both were negative in our patient. Moreover, EBV-associated HL usually involves the colorectal region, and the small bowel, but our patient's HL was extra-intestinal.

Azathioprine is used in patients with CD to maintain remission and as a steroid- sparing medication. Long-term azathioprine usage has previously been connected to the development of reversible lymphoma in IBD patients. However, its advantages clearly outweigh the risk of lymphoma, justifying its use in our case and others. It has to be determined whether this risk increases with concomitant and long-term usage of infliximab.

Conclusions

In conclusion, if patients are kept on long-term infliximab along with other immunosuppressive therapy, a higher index of suspicion and closer monitoring are needed. This potential uncommon complication needs to be acknowledged by both physicians and patients.

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