CD20-Negative Double-Expressor DLBCL: A Case of Aggressive, Chemorefractory Disease with Limited Therapeutic Options

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BACKGROUND

Diffuse large B-cell lymphoma (DLBCL) is the most common subtype of non-Hodgkin lymphoma, usually characterized by **CD20 expression**.

The **CD20-negative phenotype** is rare, associated with **high-grade biology, aggressive clinical course, and poor prognosis**.

CD20 loss precludes the use of anti-CD20 monoclonal antibodies like rituximab, a cornerstone of **standard immunochemotherapy**.

Co-expression of **C-MYC and BCL2** (double-expressor status) further defines a high-risk category with **inferior survival outcomes**.

Management is **challenging**, relying on intensive chemotherapy and emerging targeted agents, though chemorefractory **disease remains a significant clinical obstacle.**

CASE PRESENTATION

69-year-old male presented with confluent **laterocervical lymphadenopathy, asthenia, night sweats, and weight loss.**

Histopathology and immunohistochemistry: **CD20-negative DLBCL with double expression of C-MYC and BCL2.**

PET-CT INVESTIGATION

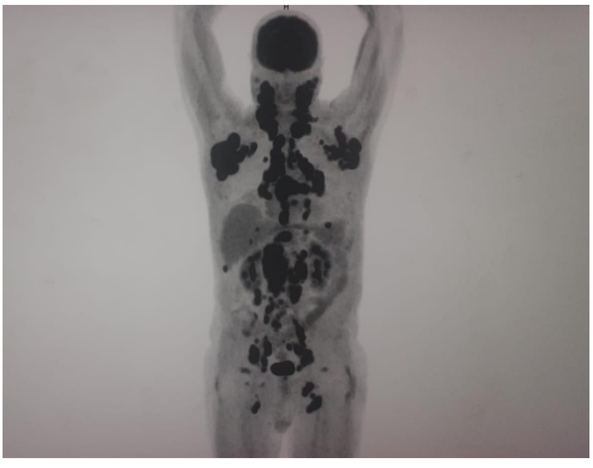


Figure 1. Initial PET-CT scan – before initiation of treatment – showing multiple Metabolically active supra and infradiaphragmatic lymphadenopathy

TREATMENT AND CLINICAL EVOLUTION

1st line of treatment: DA-EPOCH regimen: initial symptomatic improvement, but interim PET-CT demonstrated **metaboli progression with new lesions.**

Repeat biopsy confirmed **persistence of the same aggressive lymphoma subtype**.

Post-surgical complication: **persisten salivary fistula** requiring prolonged local care.

2nd line of treatment: GDP regimen: complicated by profound and protracted marrow **aplasia**, followed by **recurrent** episodes of **sepsis** with **multidrug-resistant organisms**.

Imaging: documented further **lymphadenopathy progression**, confirming chemorefractory disease.

3rd line of treatment: Lenalidomide 10 mg (off-label): **no clinical benefit**; patient succumbed to disease within two months

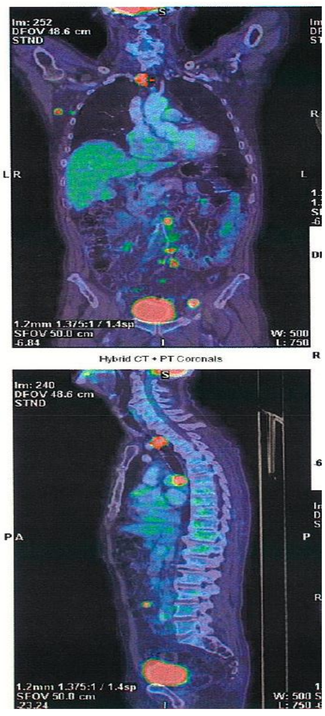


Figure 2. Interimar PET-CT scan – progressive disease with a Deauville score 5 – new lesions have appeared

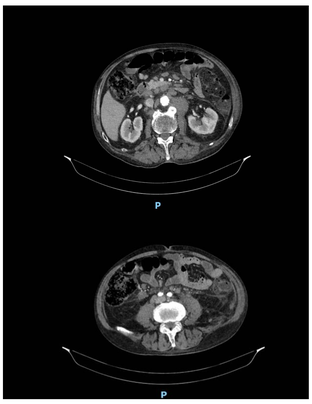


Figure 3 and Figure 4. CT scan – progressive disease after GDP regimen

DISCUSSION

This case highlights the **aggressive nature and poor prognosis** of CD20-negative double-expressor DLBCL, underlining the **limited therapeutic options and high complication risk in chemorefractory cases.**

Further research is imperative in order to aquire standard protocols and targeted therapies for CD20 negative DLBCL.