

# Classic Hodgkin lymphoma-nodular sclerosis – case report

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## ABSTRACT

Hodgkin's lymphoma is the third most common cancer in young people between 15 and 34 years of age, with a lower incidence in other age groups and slightly higher in males. The etiology of Hodgkin's lymphoma is still unknown - although various factors influencing the oncogenesis of the disease have been noted, the mechanism of their influence is poorly understood. This article will present the case of a 41-year-old patient with classic Hodgkin's lymphoma - nodular sclerosis histological subtype - chemorefractory.

**Keywords:** Hodgkin lymphoma, nodular sclerosis, chemorefractory

## INTRODUCTION

Compared to other malignant tumors, Hodgkin's lymphoma has a very good prognosis. The use of cytotoxic chemotherapy has short-term and long-term adverse effects that can affect the survival of patients: the occurrence of secondary neoplasias, heart failure, immunosuppression, pulmonary toxic effects and various endocrine disorders.

In this paper, we aimed to analyze the choice of targeted chemotherapy for the treatment of a case of chemorefractory Hodgkin's lymphoma, with the appearance of idiopathic thrombocytopenic purpura 2 years after the completion of chemotherapy [4].

## CASE PRESENTATION

41-year-old patient, with no significant personal pathological history until December 2009 - when he presented with a persistent cough associated with low-grade fever/fever that did not respond to antibiotic treatment and non-steroidal anti-inflammatory drugs. Radiological investigations (chest CT) reveal the presence of multiple mediastinal adenopathies. In February 2010, an exploratory thoracotomy was performed with the removal of an adenopathy and a lung fragment. The HP and IHC results revealed the diagnosis of Castelman Disease (Castelman angiofol-

licular lymphoma). In March 2010 the slides are examined at INCD “Victor Babes” Bucharest and at a clinic in Hungary - the diagnosis being Hodgkin's Lymphoma - histological subtype nodular sclerosis, type II BNLI - with pseudosyncytial areas. In April 2010, the ABVD type cures begin - perform 2 cures + day 1 of cure no. 3, with progressive disease under treatment and the subsequent attempt of other schemes - BEACOPP, DHAP, IGEV, including autotransplantation of stem cells (June 2011) - without remission could be obtained - which is why an experimental protocol is starting in Italy with Brentuximab, with favorable evolution confirmed by PET-CT after the first 8 courses.

He performed a total of 16 consecutive cycles of Brentuximab Vedotin (between November 2011 and October 2012). The post-therapy PET evaluation revealed the progression of the disease at the lateral-cervical and hilar pulmonary nodular level on the right side (SUV max 4.5). The patient was periodically monitored by means of PET-CT.

In May 2014, the treatment with Bendamustine was initiated, performing 6 total cycles - with good tolerance to the treatment.

From January 2016, treatment with Pembrolizumab was initiated - performing 35 administrations (the last one in January 2018) - with complete remission of the disease, with periodic control PET-CT [5-8].

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PET-CT from February 2020 - no metabolically active lesions.

In June 2020, he presented with herpes labialis, thrombocytopenic purpura in the lower limbs bilaterally and gingivorrhoea. The blood count revealed severe thrombocytopenia ( $T=30,000/\text{mm}^3$ ), the marrow aspirate puncturing the diagnosis of acute ITP - for which treatment with corticotherapy, hemostatic infusions and platelet concentrate followed - under which the symptoms subsided and the paraclinical investigations normalized.

A control PET-CT was performed in September 2020 - which showed a complete metabolic response to the oncological treatment.

## DISCUSSIONS

1. It is under discussion whether the episode of acute PTI that occurred 2 years after the com-

pletion of chemotherapy occurred as a long-term post-chemotherapy adverse event.

2. Considering that the patient had a progressive disease after Adcetris, he had an indication for Pembrolizumab outside the country [9-12].

## CONCLUSIONS

The diagnosis of multiple refractory Hodgkin's lymphoma, already subjected, starting from 2010, to treatment with ABVD, BEACOPP, DHAP, IGEV, Brentuximab and Pembrolizumab, condition in complete remission after treatment with Pembrolizumab. The occurrence of an episode of acute PTI 2 years after the end of chemotherapy, with good evolution after corticotherapy.

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