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“Overcoming Relapsed/Refractory Hodgkin Lymphoma: A Case of Success with Pembrolizumab combined with Chemotherapy”

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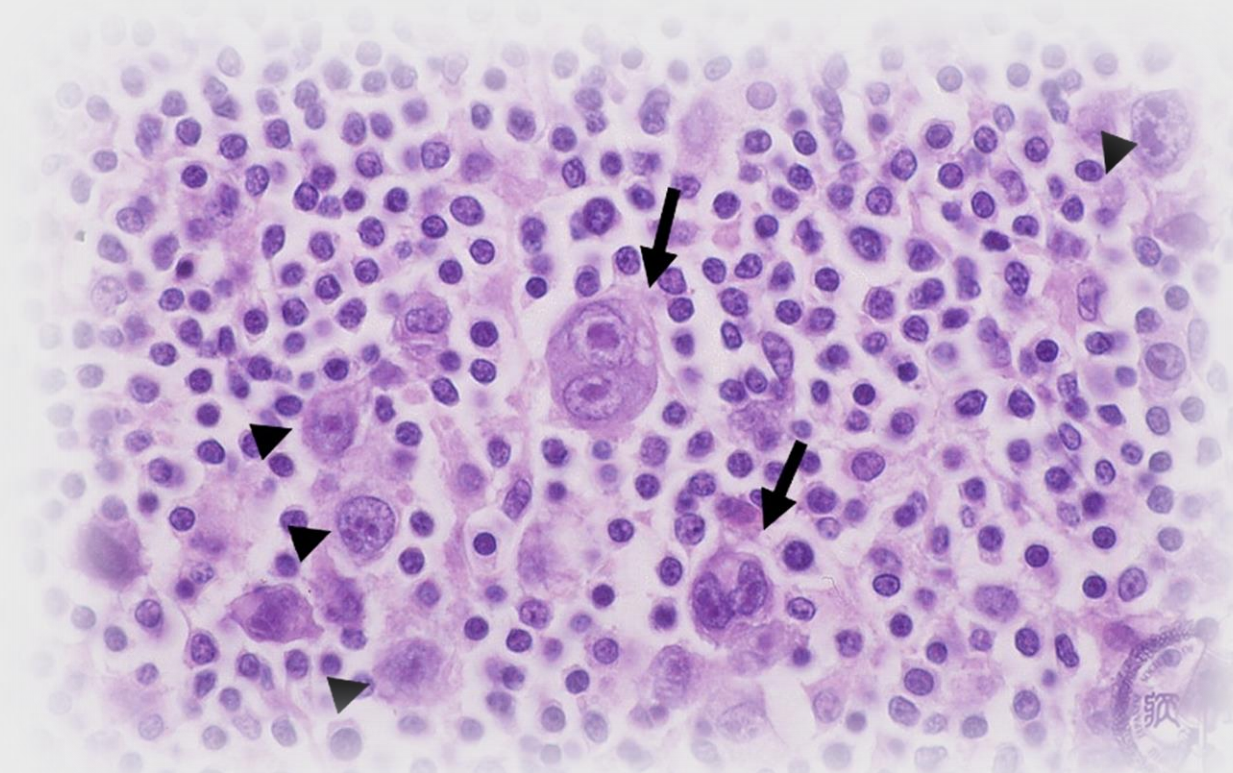
Case Summary

Introduction

Classical Hodgkin lymphoma (cHL) is generally considered a curable malignancy with standard first-line therapies. However, a subset of patients experience relapse or develop refractory disease, posing significant therapeutic challenges. While agents like Brentuximab Vedotin and PD-1 inhibitors have improved outcomes in relapsed/refractory (R/R) cHL, options are limited once resistance develops. This case highlights the potential of combining PD-1 blockade with chemotherapy to achieve a complete metabolic response and enable hematopoietic stem cell transplantation (HSCT) in a heavily pretreated patient.

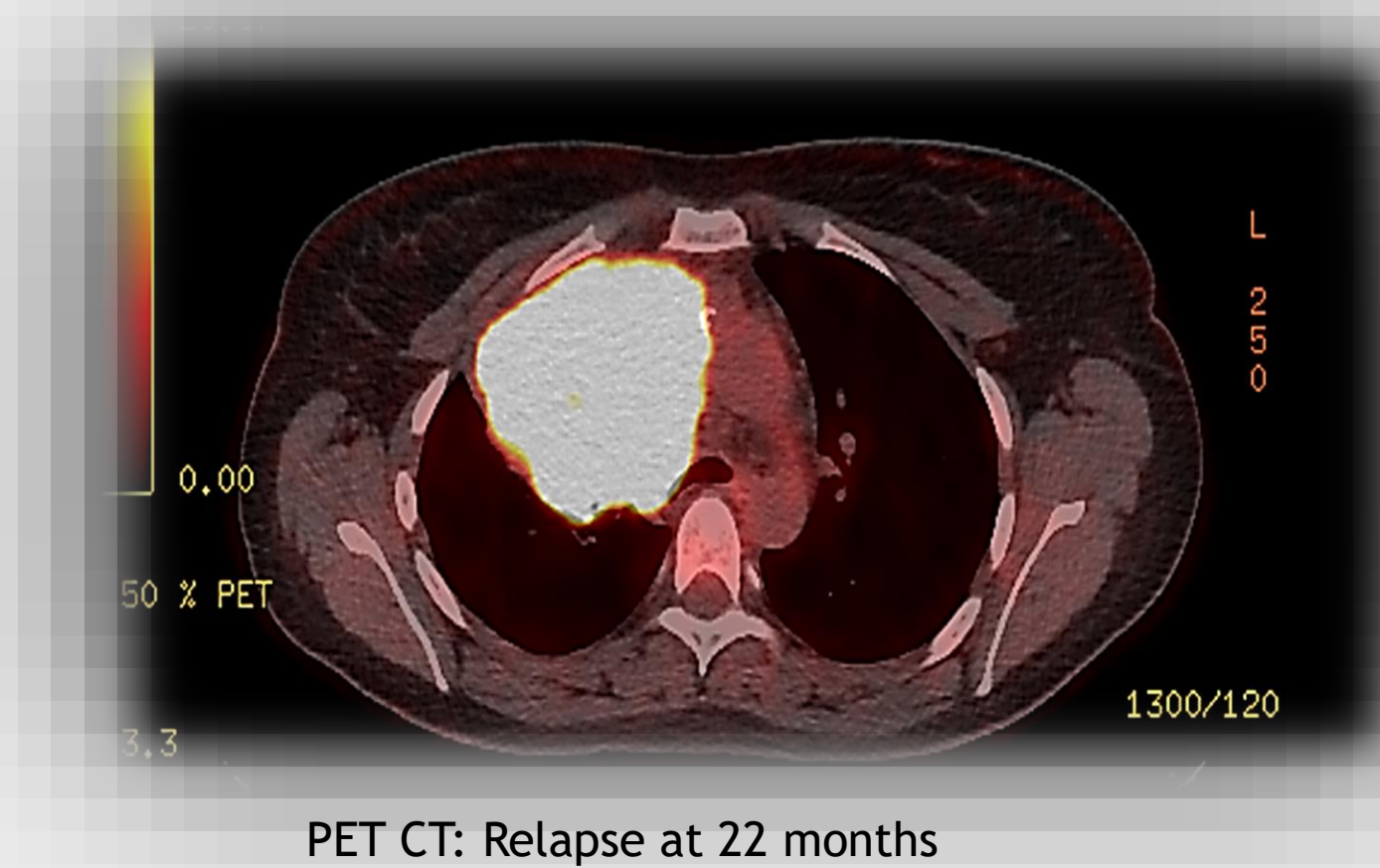
Initial Presentation:

A 27-year-old female with a history of classical Hodgkin lymphoma initially achieved complete remission following treatment with the RATHL protocol, consisting of two cycles of ABVD followed by a negative interim PET scan, and then four cycles of AVD.



First Relapse:

Twenty-two months after completing therapy, she presented with drenching night sweats, significant weight loss, anaemia, and elevated lactate dehydrogenase (LDH). Biopsy confirmed relapsed cHL. She was commenced on GDP (Gemcitabine, Dexamethasone, Cisplatin) with the intention of proceeding to autologous stem cell transplantation (ASCT).



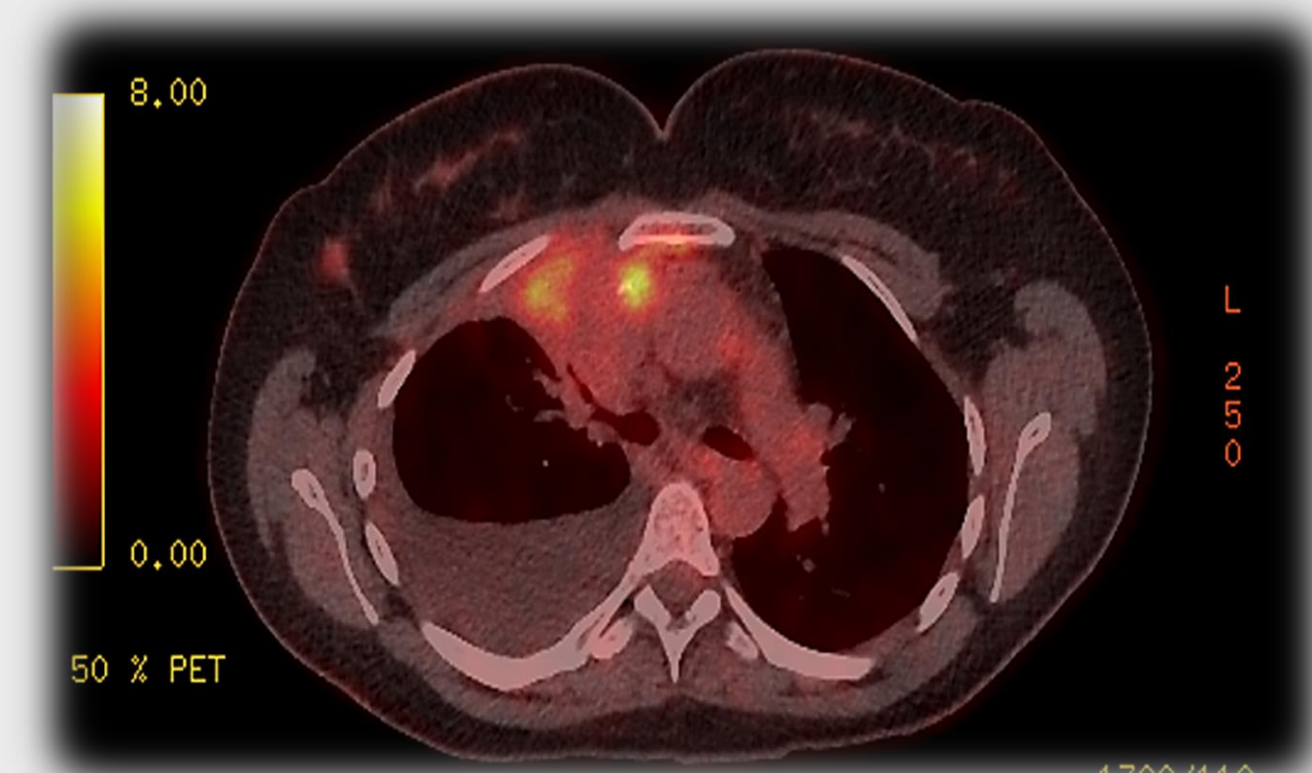
PET CT: Relapse at 22 months

Refractory Disease:

Despite GDP, her disease proved refractory, prompting a switch to Brentuximab Vedotin. After three cycles, she achieved a very good partial response (VGPR), but experienced metabolic and radiological progression before completing six cycles Brentuximab. As a next step, she was started on Pembrolizumab 200 mg monotherapy demonstrating a second VGPR. Despite this initial response, a follow-up PET scan revealed a Deauville Score of 4 with possible new disease sites, rendering her response insufficient for ASCT.

Response to Chemolmmunotherapy

At this stage, the multidisciplinary team (MDT) opted to escalate treatment to pembrolizumab 400 mg in combination with IVE chemotherapy (Ifosfamide, Etoposide, Epirubicin), which was well tolerated. A PET scan following two cycles demonstrated a complete metabolic response (CMR), allowing for successful consolidation with ASCT.



PET CT: CMR to Pembrolizumab and IVE

Conclusion

This case demonstrates the potential of combining PD-1 blockade with chemotherapy in R/R cHL. Pembrolizumab monotherapy gave only a partial response, but its combination with IVE achieved complete remission. These findings suggest immunotherapy may enhance chemosensitivity and expand treatment options when standard salvage regimens fail.

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References:

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Wikimedia Commons [Internet]. Hodgkin Disease, Reed-Sternberg Cell; [cited 2025 Sep 16]. Available from: https://commons.wikimedia.org/wiki/File:Hodgkin_Disease,_Reed-Sternberg_Cell.jpg