Case Report: A Primary Orbital Lymphoma Successfully Treated by High Dose of Chemotherapy

Nour A. Haidar MD[1], Borhane Slama MD[2], Hacene Zerazhi MD[2], Thierry Takan MD[2], Safia Chebrek MD[2]

[1]Saint Louis Hospital, Paris, France. [2]Henri Duffaut Hospital, Avignon, France

- **Primary Orbital Lymphoma is a rare type of non-Hodgkin lymphoma and represents less than 1% of all lymphomas (1-2) .Orbital lymhoma is the most prelevant malignant tumor of the ocular adnexa , making up about 55% of all orbital tumors . (3) Orbital involvement is significant due to the potential impact on vision and ocular function.**

Case presentation

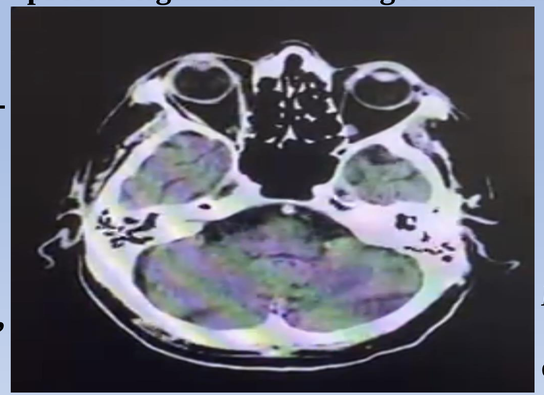
- **We report a 79-year-old male patient with a history of diabetes presented with ocular symptoms, including tearing and decreased vision, in July 2023.**
- **Initially, a cataract was suspected.**
- **Due to persistent tearing and significant vision reduction, a comprehensive ocular and systemic evaluation was initiated.**
- **A temporal artery biopsy was performed to exclude temporal arteritis (giant cell arteritis) and returned negative.**
- **In January 2024, a cerebral MRI revealed a retro-orbital mass within the right orbit, located at the apex and the superior wall. No mass was found in the left orbit (figure 1)**
- **A biopsy of the mass identified it as a low-grade follicular lymphoma, positive for CD20, CD10, and KI-67%. Initiation of steroids in February, the patient's low visual acuity has improved.**
- **A PET scan showed no additional lymph nodes.**
- **The patient received 6 cycles of R-MPV(rituximab, methotrexate, procarbazine, vincristine)chemotherapy, combined with radiotherapy.**



Figure 1:The MRI reveals a retro-orbital mass in the right orbit, situated at the apex and along the superior wall. There is no mass detected in the left orbit.

Discussion

- **Patients with orbital lymphoma often do not have a history of previous lymphoma and typically do not exhibit systemic lymphoma manifestations.**
- **Orbital lymphoma most commonly occurs in the age group 50-70 years and shows a slight predominance in females .(4) In our case the patient was 79 years old male .**
- **Most presentation of the tumors are unilateral; However 5% of cases report a bilateral involvement (5).**
- **Reported cases have described tumors with high vasculiarity often require bipsy or tumor removal (1-6).Our case not present significant challenges with hemostasis .**



- **Complete remission without significant complications has been achieved with chemotherapy and radiotherapy (Figure 2) administered at median dose .**

Figure 2: The Ct scan showed a complete remission post chemotherapy and radiotherapy

Conclusions

- **Our case of a 79 year-old male with Unusual presentation is quite unique and warrants to be reported.**
- **Orbital lymphoma is an uncommon clinical entity with an unusual presentation. Despite its frequency, it can be successfully treated with a multimodal approach, combining various treatment strategies to achieve optimal outcomes.**
- **Chemotherapy and radiotherapy are essential in the management of Primary Orbital Lymphoma , depending on the lymphomas specific features .**

References

1.C. Freeman, J.W. Berg, S.J. Cutler Occurrence and prognosis of extranodal lymphomas Cancer, 29 (1972), pp. 252-260

2.P.J. Fitzpatrick, S. Macko Lymphoreticular tumors of the orbit Int J Radiat Oncol Biol Phys, 10 (1984), pp. 333-

3.Margo CE, Mulla ZD. Malignant tumors of the orbit: Analysis of the Florida Cancer Registry. Ophthalmology 1998;105:185-90.

4. Eckardt AM, Lemound J, Rana M, Gellrich NC. Orbital lymphoma: Diagnostic approach and treatment outcome. World J Surg Oncol 2013;11:73.

5. Priego G, Majos C, Climent F, Muntane A. Orbital lymphoma: Imaging features and differential diagnosis. Insights Imaging 2012;3:337-44

6. Sriram PR. A Rare case of aggressive, huge primary orbital lymphoma with intracranial extension and bone invasion. Asian J Neurosurg 2017;12:766-8.