

Central Serous Chorioretinopathy in a Patient with B-cell Non-Hodgkin Lymphoma

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Abstract

Central serous chorioretinopathy (CSCR) is an ocular disease which fluid is collected under retina and leads to retinal detachment and blurred vision. Risk factors for development of central serous chorioretinopathy are included: alcohol use, uncontrolled hypertension, pregnancy, type A personality and different ways of corticosteroid use. We want to present central serous chorioretinopathy in a case of B-cell type Non-Hodgkin lymphoma (NHL) after taking 6th course of CHOP regimen which was presented with left- sided blurred vision.

Key-words: Central serous chorioretinopathy, Lymphoma, Prednisolone

Introduction

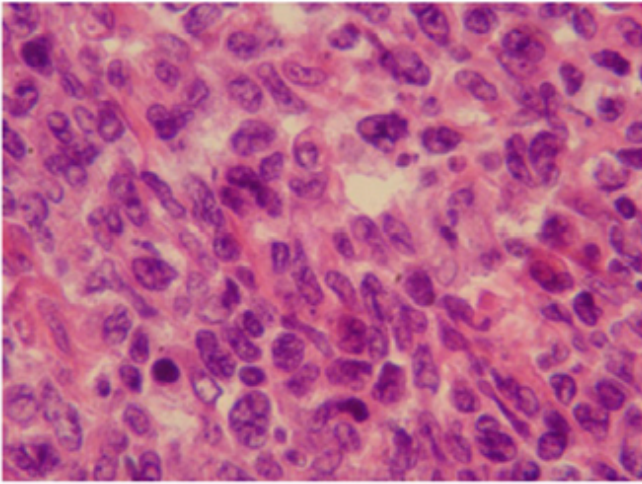
Central serous chorioretinopathy is a disease that fluid leaks from choriocapillary and collected under retina and leads to serous detachment of retina.(1) There is an association between various forms of steroid use (parenteral, ophthalmic, oral, epidural injection, intra-articular injection , inhaled and topical forms) and CSCR.(2- 9) Bandello F ,et al in 2002 reported the first case of corticosteroid induced bilateral CSCR in a patient with Non-Hodgkin lymphoma.(3) We want to report second case of CSCR in a patient with NHL after 6th course of chemotherapy with CHOP regimen included oral prednisolone.

Case history: A 45 year old woman, presented with abdominal pain. Physical examination revealed jaundice and hepatosplenomegaly. Due to multiple hepatic and splenic masses which were detected in abdominal ultrasonography, splenectomy was done, and diffuse large cell lymphoma was revealed in pathological examination of spleen.(Figures- 1) Immunohistochemistry (IHC) study was positive for LCA & CD20, and negative for CD3. (Figure- 2: A, B and C) Diagnosis of diffuse large B-cell lymphoma was confirmed and chemotherapy with CHOP regimen (including cyclophosphamide

750mg/m², adriamycin 50 mg/m², vincristine 2 mg and prednisolone 50 mg BID ×5 days) in 3 week intervals was initiated. After administration of 6th CHOP regimen, she returned with left sided blurred vision. With possibility of left eye lymphomatous involvement, we referred her to an ophthalmologist who documented diagnosis of left eye central serous chorioretinopathy with Optical Coherence Tomography (OCT) and noted that most likely cause of CSCR in this patient is prednisolone (50mg BID×5 days) in cycles of chemotherapy with CHOP regimen and started oral Propranolol to her. She received reduced dose of prednisolone (50 mg daily×5 days) in 7th and 8th CHOP cycles. Left eye blurred vision was resolved during two months. Now after 3 years she is free of disease, with normal vision and without any evidences of lymphoma and CSCR.

Discussion

In this case of NHL with blurred vision ,although at first we had suspected to lymphomatous involvement of eye, but diagnosis of central serous chorioretinopathy most likely due to prednisolone in CHOP regimen was confirmed with OCT by an ophthalmologist and he administered Propranolol for her. We continued another 2 cycles of CHOP



Figures- 1. Diffuse large cell lymphoma was revealed in pathological examination of the spleen.

chemotherapy with reduced dosage of prednisolone and clinical evidences of CSCR was recovered during two months. Central serous chorioretinopathy is a disease that fluid leaks from choriocapillary and collected under retina and leads to serous detachment of neurosensory retina. It generally recovers spontaneously but rarely may not resolve.

Corticosteroids consumption is one of the risk factors for CSCR. Other risk factors are included: alcohol use, uncontrolled systemic hypertension, pregnancy and type A personality.(2, 10) CSCR is reported after various ways of corticosteroids therapy.(2- 9)

There is only one case of Non-Hodgkin lymphoma (NHL) in the literature with steroid-induced bilateral CSCR. We reported second case of NHL which developed CSCR after 6th course of chemotherapy with CHOP regimen which contains oral prednisolone 50 mg BID×5 days. After starting propranolol and reducing prednisolone dosage to 50 mg daily ×5 days in the last 2 cycles of CHOP chemotherapy it resolved during two months.

We should think for central serous chorioretinopathy in any patient with lymphoma and blurred vision which is under treatment with steroid containing regimen such as CHOP. An ophthalmological consultation would be necessary in this situation.

Authors not declaring conflicts of interest.

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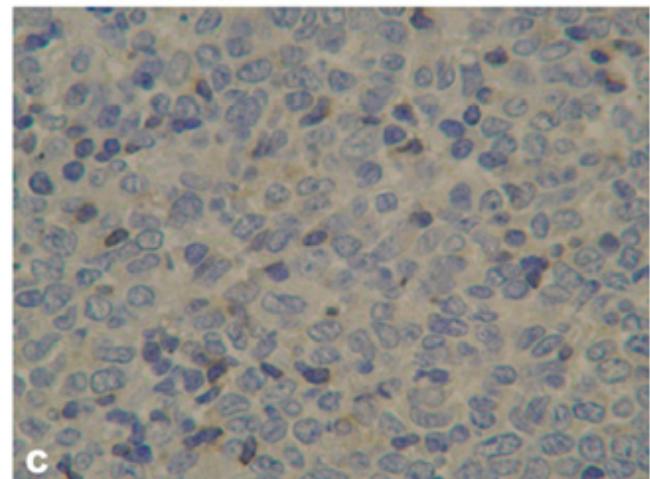
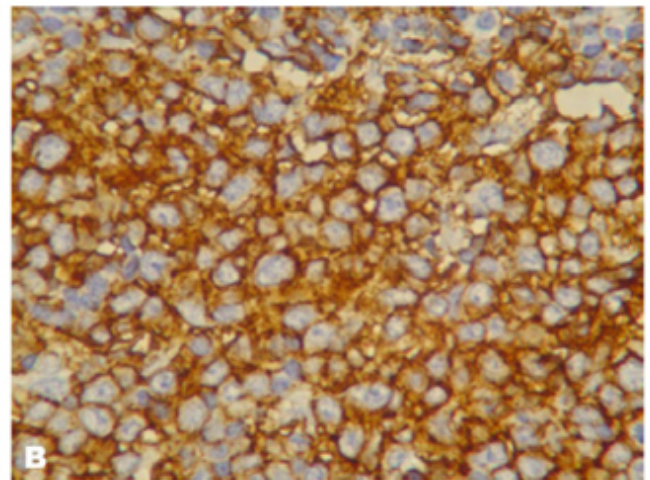
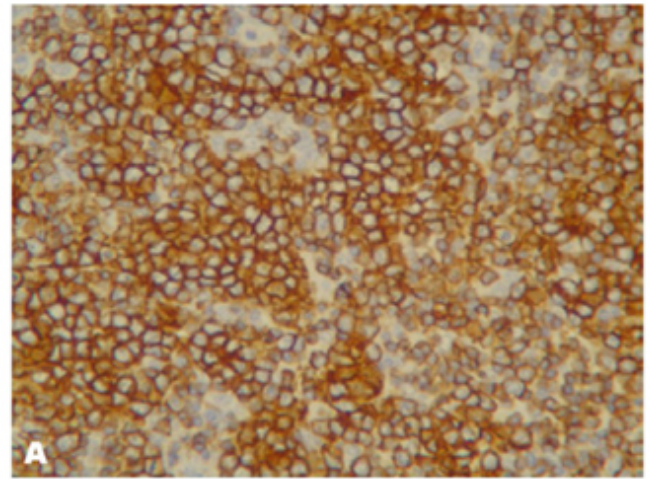


Figure- 2. Immunohistochemistry (IHC) study was positive for LCA & CD20 (A, B), and negative for CD3 (C).

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