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Conjunctival Malt Lymphoma: A Case Report

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ÖZET

Konjonktival MALT Lenfoma: Olgu Sunumu

MALT (Mucosa associate lymphoid tissue) lenfoma, tam olarak sınıflandırılmamakla birlikte matür B hücrelerinin lenfoproliferatif mekanizması ile oluşur. Bu mekanizma kronik antijenik stimülasyon ile gelişir ve ekstranodal marjinal zon indolent B hücreli nonhodgkin lenfoma sınıfında yer alır. MALT lenfomaların çoğu gastrointestinal sistemde görülmekle birlikte orbita, konjunktiva, lakrimal gland, mesane, akciğer, dura, tiroid, meme, ve deri yerleşimli olabilir. Genellikle yavaş büyürler ve iyi prognozludurlar. Kemoterapi ve radyoterapi ile tedavi edilebilirler. Bu çalışmada, 43 yaşında, kadın konjunktiva yerleşimli MALT lenfoma tanısı alan ve tedavisi yapılan hasta klinik ve patolojik özellikleri ile tartışıldı .

Anahtar Kelimeler: *MALT lenfoma, Kemoterapi, Radyoterapi*

SUMMARY

Whilst the etiology of the MALT (Mucosa Associate Lymphoid Tissue) lymphoma is not perfectly clarified, the blamed mechanism is a mature B-cell lymphoproliferative processes. This process is considered to have developed in connection with chronic antigenic stimulation which belongs to the extranodal marginal zone B-cell nonhodgkin indolent lymphoma class. A majority of the MALT lymphoma appear in the gastrointestinal system yet they may appear in tissue and organs like orbita, conjunctiva, lacrimal gland, bladder, lung, dura, thyroid, breast, and skin. Generally they have slow course and favorable prognoses. Chemotherapy and radiotherapy treatment options might be used. In this article, we are reporting 43 year old, female conjunctival MALT lymphoma demonstrative case with clinic and pathological specifications.

Key Words: *MALT (Mucosa Associated Lymphoid Tissue) lymphoma, Chemotherapy, Radiotherapy*

INTRODUCTION

Extranodal marginal zone B-cell lymphomas of the mucosa associated lymphoid tissue are generally slow growing lesions. Ocular adnexal lymphomas of the MALT type, are encountered more rarely compared to gastric marginal zon B-cell lymphomas. These show indolent course and very seldom become fatal. They may root from the eyelids, lacrimal gland, conjunctiva, and orbita.

In gastric MALT lymphoma patients, H.pylori and infection are observed in a rate between 72 % to 90 % (1). In so much as that only antibiotics and H.pylori eradication lead to regression 70 % to 80 % of gastric MALT lymphoma cases (2). Whilst the role the infectious agents, except H.Pylori, on MALT lymphomas are relatively less known, Chlamydia psittaci existence has been shown in ocular adnexal MALT lymphomas (3). Borrelia burgdorferi infection has been observed in some skin lymphomas (4,5). Again, an association has been determined between Hepatit C virus infection and extranodal lymphomas (6,7).

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Case Report

43 year old female patient, working as a nurse in the eye clinic was examined two years ago for the sense of a foreign body in her right eye (figure 1). A swollen mass was identified in right eye conjunctiva inferior fornice mucosa and punch Biopsy was applied. In the microscopic analysis, small lymphocytic infiltration, starting right under the epithelium and forming intensive diffuse masses attracted notice Figure 2,3). It was diagnosed as conjunctiva containing small lymphocytic proliferation (figure 4). Histomorphologically, apparent malignancy findings were not observed in the monitored sections, yet the report was prepared as "These findings do not retract MALT lymphoma. Clinic follow-up and further examinations are suggested". Torax, Abdomen and pelvic CT (Computerized Tomography) and orbital/cranial MRI (Magnetic Resonance Imaging) analysis carried out that day did not show any metastasis and the case was evaluated as (Phase IE) for Ann Arbor classification.

The gastric biopsy taken in esophagogastroduodenoscopic inspection showed positive and it was diagnosed as chronic active gastritis. Yet, atrophy negative and malignancy or metaplasia were not identified. For further inspection, incisional

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biopsy was requested from conjunctiva lower fornice. Intensive lymphoid infiltration was identified starting right from under the epithelium, filling whole subepithelial area, more dominant then centrocyte like cells containing ambiguous folicular organization.

As a result of the immunohistological analysis carried out using anti-CD3, CD20, kappa, lambda and bcl-6 antibodies, nearly all of the cells forming infiltration showed positive reaction with CD20 (figure 1). Cell groups are observed which show positive reaction in small groups with CD3. Few cells showed reaction with bcl-6 antibody. In the analysis carried out with kappa and lambda light chain antibodies, many cells having plasma cell or paslacitoid cell morphology in infiltration showed reaction with kappa (Figure 2) whereas very few cells showed reaction with lambda. Morphological and immunphenotypic findings were found coherent with low-grade B-cell lymphoma (MALT lymphoma), rooted from mucosa associated lymphoid tissue and the diagnosis was reported as; Right eye lower fornice, conjunctiva incisional biopsy: B cell neoplastic lymphoid infiltration showing kappa light chain monotype.

The patient was started subconjunctival intralesional interferon-· injection following this diagnosis. The patient showed no regression after 14 months of treatment, and an increase was observed in tumor border towards medial. In physical examination, salmon patch shaped typical lesion existed in the right eye conjunctiva lower fornice (Figure 3).

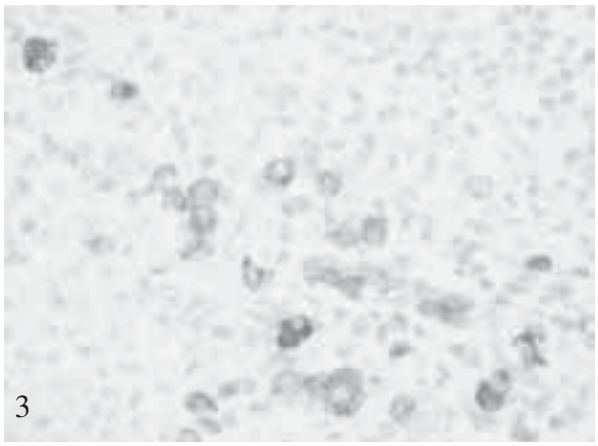
The patient was accepted as refractor for local interferon treatment, and was sent to our institution for evaluation in terms of radiotherapy. The patient did not have sight problem. Therefore, RT was not considered as the first treatment. For the beginning, being CD20 positive, a treatment was planned with rituximab which is a CD20 antibody. Considering patient's history; she was feeding a bird (a kind of a small parrot) until two years before; 3 weeks doxycycline empiric antibiotherapy treatment was added to the treatment. Rituximab 375 mg/m2 per week for 4 weeks; and 100 mg Doxycyclin per day for 3 weeks was started.

Complete response was positive after treatment. The patient showed no recurrence during 3 months-interval follow up's which lasted until May 2009.

DISCUSSION

Conjunctival MALT lymphomas show indolent clinic course, and generally have low spreading risk. In physical examination, orange or salmon-pink masses draw attention (9). For orbital adnexal MALT lymphomas, treatment options include only follow-up (no initial therapy) (10), Radiotherapy (11), Chemotherapy (12), Rituximab (13), antibiotics (Doxycycline) (14), subconjunctival (intralesional) interferon-· injection (15).

Radiotherapy has shown successful results, yet it has side effects like cataract and eye drying. Long-term follow-up with no initial therapy might be suitable option for selected cases since it has a slow course (10,16). Whilst chemotherapy is a very effective treatment option, systemized chemotherapy might be considered in acute cases as well as palliative treatment. Although the role of Rituximab treatment has not perfectly be clarified, it is a suitable option with high response rates and low toxicity. Bacteria-eradicating therapy model with Doxycycline is considered as a fast, safe and active treatment in ocular adnexal MALT lymphomas according to a multicenter prospective study. This treatment has been effec-



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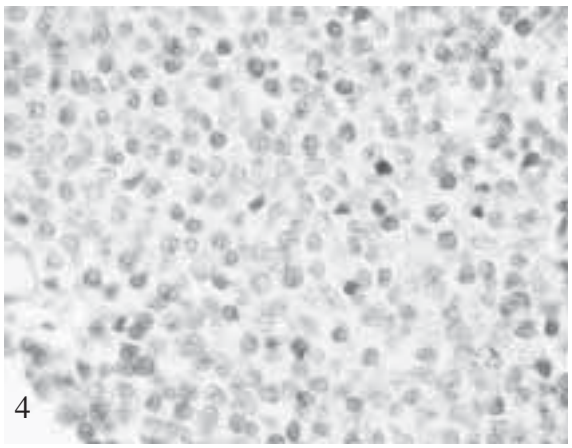
tive in patients who have received RT and progressed, and it has even been effective in Chlamydia psittaci-DNA negative cases (17).

As a result, each case requires appropriately in ocular adnexal MALT lymphomas before determining the most appropriate treatment option. In clinic application; wait and see policy, anti-CD20 antibody treatment and bacteria-eradicating therapy are likely to forge ahead whereas RT which once was considered as the first-line treatment, is likely to fall back.



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REFERENCES

1. **Parsonnet J, Hansen S, Rodriguez L et al.** Helicobacter pylori infection and gastric lymphoma. N Engl J Med. 1994; 330: 1267-71.
2. **Neubauer A, Thiede C, Morgner A et al.** Cure of Helicobacter pylori infection and duration of remission of low-grade gastric mucosa-associated lymphoid tissue lymphoma. J Natl Cancer Inst. 1997; 89: 1350-5.
3. **Ferreri AJ, Guidoboni M, Ponzoni M et al.** Evidence for an association between Chlamydia psittaci and ocular adnexal lymphomas. J Natl Cancer Inst 2004; 96: 586-94.
4. **Cerrani L, Zochling N, Putz B et al.** Infection by Borrelia burgdorferi and cutaneous B-cell lymphoma. J Cutan Pathol 1997; 24: 457-61.
5. **Roggero E, Zucca E, Mainetti C et al.** Eradication of Borrelia burgdorferi infection in primary marginal zone B-cell lymphoma of the skin. Hum Pathol 2000; 31: 263-8.
6. **Luppi M, Longo G, Ferrari MG et al.** Additional neoplasms and HCV infection in low-grade lymphoma of MALT type. Br J Haematol 1996; 94: 373-5.
7. **Ascoli V, Lo Coco F, Artini M et al.** Extranodal lymphomas associated with hepatitis C virus infection. Am J Clin Pathol 1998; 109: 600-9.
9. **Minasian MC, Sharma A, Richman PI et al.** Conjunctival MALT lymphoma: an unusual cause of red eye. Postgrad Med J 1999; 75: 423-4.
10. **Tanimoto K, Kaneko A, Suziki S et al.** Long-term follow-up results of no initial therapy for ocular adnexal MALT lymphoma. Annals of Oncology 2006; 17: 135-40.
11. **Uno T, Isobe K, Shikama N et al.** Radiotherapy for extranodal marginal zone B-cell lymphoma of mucosa-associated lymphoid tissue originating in the ocular adnexa: multiinstitutional, retrospective review of 50 patients. Cancer 2003; 98: 865-71.
12. **Song K-E, Kim Y-S, Kim MT et al.** Efficacy of chemotherapy as first line treatment in ocular adnexal extranodal marginal zone B-cell lymphoma. Annals of Oncology Advance Access published october 17, 2007. Annals of Oncology doi:10.1093/annonc/mdm457.
13. **Ferreri AJ, Ponzoni M, Martinelli G et al.** Rituximab in patients with mucosal-associated lymphoid tissue-type lymphoma of the ocular adnexa. Haematologica 2005; 90: 1578-9.

14. Ferrei AJ, Panzoni M, Guidoboni M et al. Regression of ocular adnexal lymphoma after Chlamydia psittaci-eradicating antibiotic therapy. J Clin Oncol 2005; 23: 5067-73.

15. Blasi MA, Gherlinzoni F, Calvisi G et al. Local chemotherapy with interferon-alpha for conjunctival mucosa-associated lymphoid tissue lymphoma: a preliminary report. Ophthalmology 2001; 108: 559-62.

16. Matsuo T, Yoshino T. Long-term follow-up results of observation or radiation for conjunctival malignant lymphoma. Ophthalmology 2004; 111: 1233-7.

17. Ferreri AJ, Ponzoni M, Guidoboni M et al. Bacteria-eradicating therapy with doxycycline in ocular adnexal MALT lymphoma: A multicenter Prospective Trial J Natl Cancer Inst 2006; 98: 1375-82.