ORIGINAL PAPER

# Non-Hodgkin Malignant Lymphoma study – admitted cases during 1990–2005 in Ophthalmologic Clinical Department, Oradea

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**Abstract**

Non-Hodgkin Malignant Lymphomas are rare tumors, difficult to be diagnosed. We've made a clinical and paraclinical retrospective study, along 15 years (1990–2005), estimating the moment of onset, clinical and anatomo-pathological features, in each of the 11 cases.

***Keywords*:** malignant lymphoma, histological types, anatomo-pathological results.

## Introduction

Non-Hodgkin Malignant Lymphoma is difficult to be diagnosed, often thought to belong to chronic orbitary inflammations; the certitude diagnosis is based upon immune-hystochemical and anatomo-pathologic methods [1–3].

The classical radiological investigation, performed along the studied period of time, did not clarify the diagnosis, mainly during early 90's (were lacking high performance imagistic methods).

We made a comparison of obtained results, with those from other published medical researches.

## Material and methods

Along 1990–2005 were analyzed a total number of 21 030 admitted cases, in our department, together with anatomic-pathologic examinations; the study revealed 3 850 orbitary tumors, among these 11 were diagnosed with Orbitary-Conjunctival Non-Hodgkin Malignant Lymphoma, representing 0.052% of total admitted cases, and 3.5% of Orbitary Tumors; the 11 cases were found in eight females and three males, with an average of 65.2 years of age, between the two extremities: 48 and 89 years old.

To the suspected lesions was done bioptic examination (the biopsy was obtain during the surgical procedure); the different histological types were classified in accordance with REAL Classification; we could not perform any genetic analyze (Figure 1–3).

## Results

In all studied cases, was noticed a painless orbitary, conjunctival mass. Other associated clinical signs were represented by: chemosis, conjunctival congestion, palpebral ptosis, exophtalmy and diplopy (Table 1).

**Table 1 –** ***Clinical signs associated with Orbitary-Conjunctival Non-Hodgkin Malignant Lymphoma***

| Clinical signs | No. of cases |
|---|---|
| Orbitar tumor | 2 |
| Conjunctival tumor | 9 |
| Chemosis | 7 |
| Palpebral ptosis | 1 |
| Exophtalmy and diplopy | 2 |

Among the 11 patients, six had neoplasic history, and two intra-familial Hodgkin histories. The R(x) investigations were limited, because the only antero-posterior and lateral incidences.

Only two cases were diagnosed after 2000, using MNR. All cases were identified to be lymphoma type B, in four cases the malignancy was low (MALT type), in two cases the malignancy was medium (Figures 4 and 5). In other two cases the malignancy was important.

Among the MALT Lymphoma, three were located at conjunctiva level, one at orbitar–palpebral level (Figures 4 and 5); the extension could be noticed only in orbitary locations.

The haematological treatment was adapted to the histological type and extension ratio. Eight of the patients have done chemotherapy and three, radiotherapy.

Four of the total number (11) developed a complete remission after the initial chemotherapy treatment, three developed a partial remission after chemotherapy, and therefore the treatment was completed with radiotherapy, two of them followed simultaneous chemo-and radiotherapy with complete remission.

Two of the 11 cases, died due to lymphoma complications, both with high malignant degree of lymphoma.

The therapeutic complications were represented by: complicated cataracts, Dry-eye syndrome, and lacrimal point stenosis.

The stadialized clinical forms, the histological respects and the evolution are presented in Table 2.

**Table 2 –** ***Stadialized clinical forms, histological types and evolution of the Orbitary-Conjunctival Non-Hodgkin Malignant Lymphoma***

| No. | Affected eye | Location | Stadial degree | Histological type | Evolution |
|---|---|---|---|---|---|
| 1. | RE | Conjunctive | IE | b/A | Remission after three months of treatment |
| 2. | LE | Conjunctive | IE | b/A | Remission after one month of treatment |
| 3. | LE | Conjunctive | IE | b/A | Remission |
| 4. | RE | Conjunctive | IE | b/MALT | Remission after eight months of treatment |
| 5. | BE | Orbitar | IVE | b/A | Died |
| 6. | LE | Conjunctive | IE | b/A | Remission after one year |
| 7. | LE | Conjunctive | IIIE | b/MALT | Remission after four years |
| 8. | BE | Conjunctive | IIE | b/A | Recurrence after two months |
| 9. | RE | Conjunctive | ? | b/A | ? |
| 10. | RE | Orbitar | IVE | H/H | Died |
| 11. | LE | Conjunctive | IE | b/MALT | |

*RE – right eye; LE – left eye; BE – both eyes*

## Discussions

Orbitary–Conjunctival Lymphomas are rare orbitar diseases, representing 5–10%of orbitary tumors [1, 2]. In the study, the incidence was lower than 1% of all admitted cases in our department, and 3.5% of all diagnosed orbitary tumors.

In the Ducrey N [3] opinion's, they represent 4% of orbitary diseases and the majority is MALT type, with B-cells in peripheral areas. In our study, 27.3% of Orbitary-Conjunctival Lymphomas were similar with other studies results, as a painless, isolated orbitary conjunctival mass [4, 5].

The certitude diagnose is based upon anatomo-pathologic investigation, and in ideal situations, accompanied by immunohistochemical and genetic investigations (Figures 6–8).

The first intention treatment, in symptomatic situations and in high malignant cases, is represented by local associated chemo-and radiotherapy.

The news in therapeutic field, as anti CD20 antibodies, seems to be efficient in low level of malignancy [6, 7].

## Conclusions

Orbitary-Conjunctival Non-Hodgkin Malignant Lymphoma, there are rare diseases. The certitude diagnoses can be sustained upon pathologic and immunohistochemical investigations.

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*Received: November 23rd, 2006*

*Accepted: February 20th, 2007*

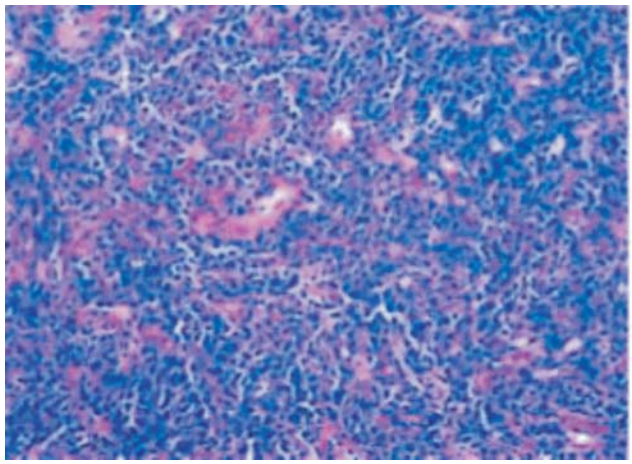


**Figure 1 –** ***Orbitary Non-Hodgkin Malignant Lymphoma, with small cells (HE staining, ×10)***

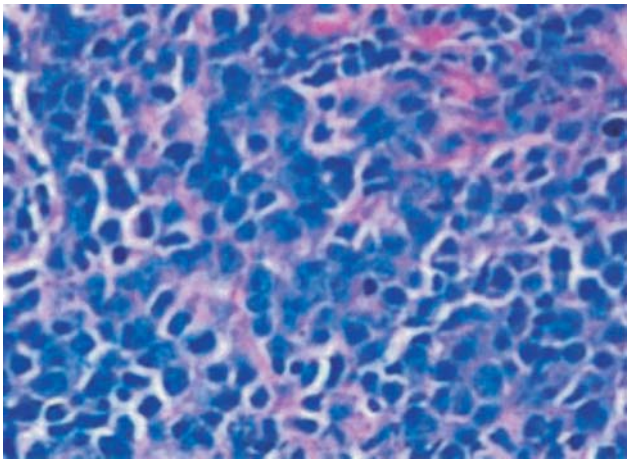


**Figure 2 –** ***Orbitary Non-Hodgkin Malignant Lymphoma, with small cells (HE staining, ×20)***

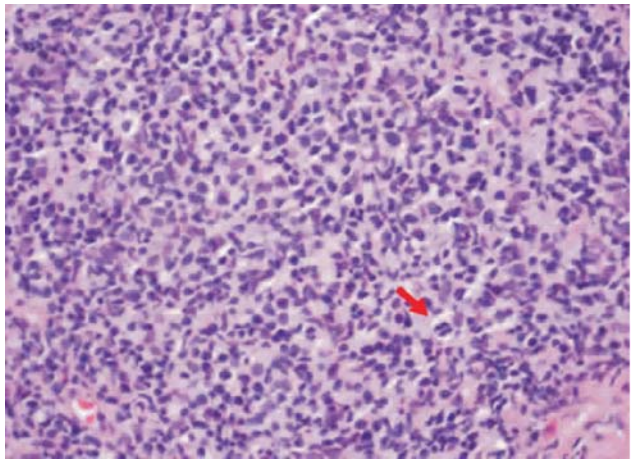


**Figure 3 –** ***Non-Hodgkin Malignant Lymphoma, with intermediate malignant B cells, in orbitary localization (HE staining, ×20)***

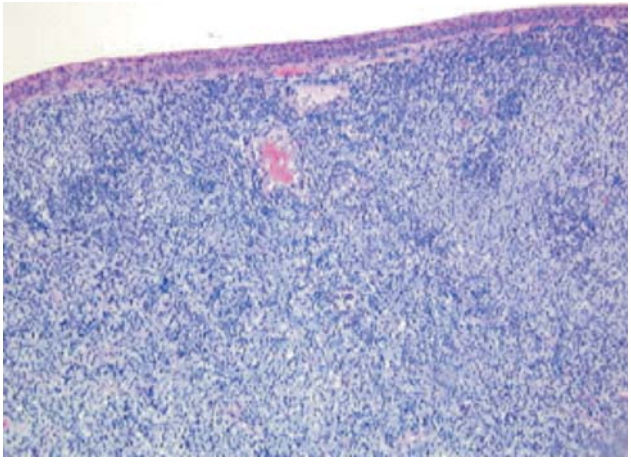


**Figure 4 –** ***Conjunctival Malingnant Lymphoma with small cells (MALT) (HE staining, ×10)***

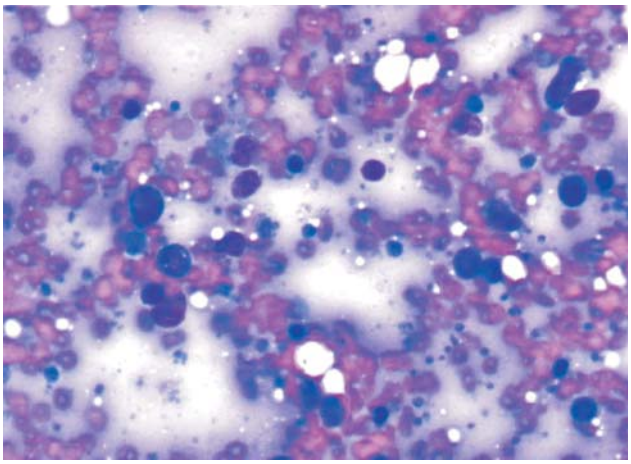


**Figure 5** – ***Cytology of LMNH with Small Cells (MGG, ×40)***

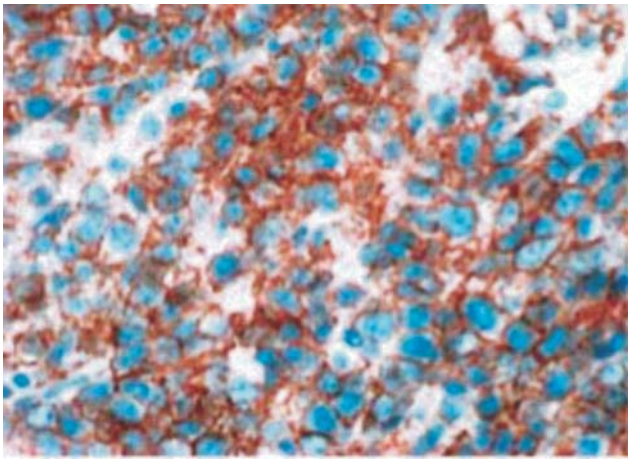


**Figure 6** – ***CD20+ immuno-histochemistry in Conjunctival LMNH***

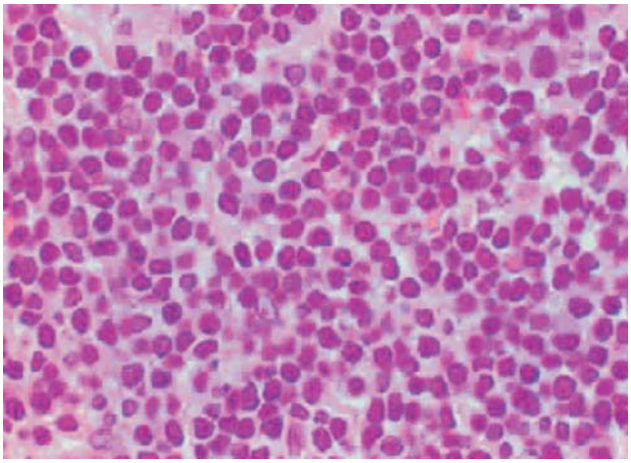
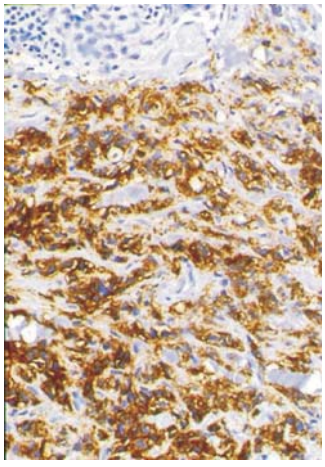


**Figure 7** – ***LMNH with Small Cells, B-lymphocytes (HE staining, ×40) in a patient with LMH history***



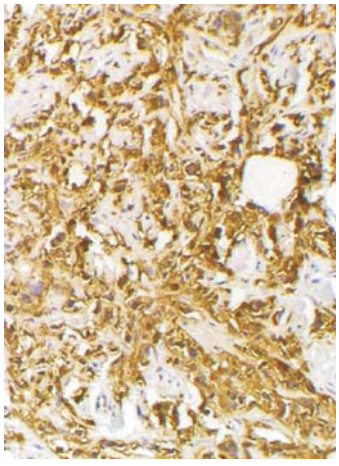


**Figure 8** – ***CD 20+ immuno-histochemistry in LMNH with small cells***