

## CASE REPORT

## A Case of Bilateral Testicular Lymphoma

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**Authors report on a 75-year-old man with bilateral testicular lymphoma. He complained of painless right testicular enlargement. Orchidectomy was indicated by ultrasound examination and the diagnosis (large cell, non-Hodgkin lymphoma B-cell origin) was established by histology and immunohistochemistry. Two months later, the left testis enlarged, orchidectomy was performed, and a lymphoma with identical histology was found. PET**

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**revealed retroperitoneal spread of the tumor. Irradiation (18 Gy) was applied. Three months later, because of gastric metastases of the lymphoma the patient underwent CVP and CAVP (Cyclophosphamide, Adriablastin, Vincristin, Prednisolone) chemotherapy. Despite of the repeated courses, eleven months after the primary diagnosis the patient died due to of multiple metastases. (Pathology Oncology Research Vol 5, No 2, 152–154, 1999)**

### Introduction

The most frequent occurrence of testicular tumors is in the second and third decades of life.<sup>1</sup> Tumors of the testis are quite rare in the elderly – even those occurring in infancy are more frequent – but their occurrence must be reckoned with.<sup>2</sup> This rarity is why our case of bilateral testicular lymphoma caused diagnostic difficulties.

### Case report

In February 1995, a 75-year-old man came to our department because of the painless enlargement of his right testis. Ultrasound showed an enlarged testis with homogeneous echogenicity (*Figure 1*). Malignant tumor was diagnosed and the patient underwent unilateral orchidectomy (*Figure 2*). Histology showed a diffuse large cell non-Hodgkin lymphoma of B-cell origin (upon the positivity with pan-B marker) (*Figure 3,4*). With regard to the malignancy, another operation was performed in March exposing the hernia canal, and the funiculus was also

removed. The patient returned to the Clinic in May due to the enlargement of his left testis. CT showed no enlargement of lymph node, spleen or liver, but ultrasound image of the left testis was similar to that of the right one. Therefore, the left testis was also removed, performing a high orchidectomy. The urological tumor markers were of normal value. PET (positron emission tomography) examination revealed bilateral retroperitoneal growth, so the patient underwent reverse Y radiation (18 Gy) at the



*Figure 1. Ultrasound picture of the right testis. The testis is enlarged showing homogeneous echogenicity.*

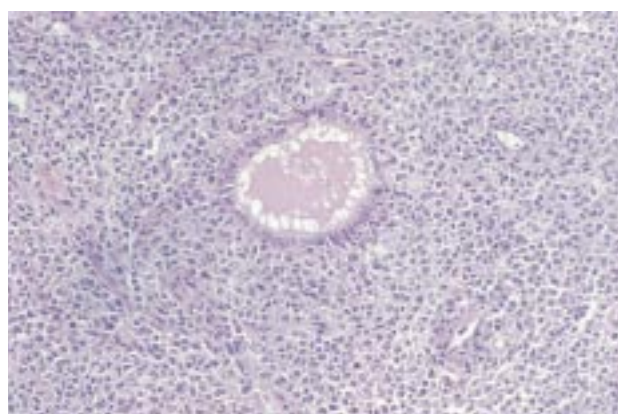
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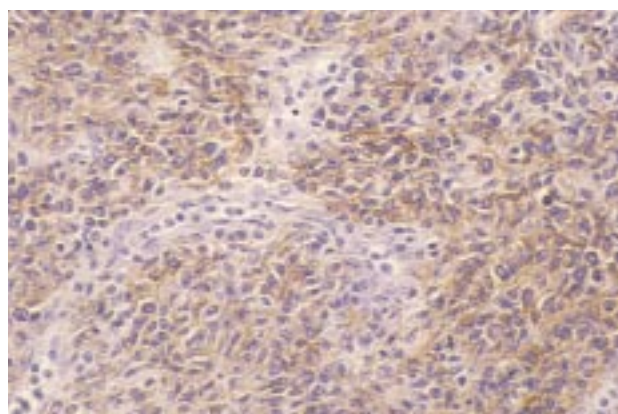
Onco-Radiological Department of the Imre Haynal University. Histology of the left testis also showed a large (B) cell lymphoma. Quantitative DNA analysis of the left testis indicated a rapidly proliferating tumor (proportion of cells in S-phase: 22%). Thereafter the patient was kept



**Figure 2.** The incised preparation, showing homogenous tumorous infiltration of the right testis.



**Figure 3.** Histology of the non-Hodgkin lymphoma, infiltrating the testis (HE x300).



**Figure 4.** The lymphoma cells are CD20 positive. (x300).

under further control. In June 1995 he was admitted again to hospital because of melena. Bigemin-frequency necessitated temporary, then permanent pacemaker. Ten days later the patient was received again due to repeated melena. Gastroscopy showed an ulcer, from which biopsy proved large (B) cell lymphoma. Simultaneously, an ulcer on the ankle developed as well, and the biopsy once again proved lymphoma of similar histology. The patient underwent CVP treatment (2 mg Vincristine, 1200 mg Cyclophosphamide, then 65 mg/day of Prednisolone for 5 days). Since the skin alteration was not improving sufficiently, Interferon was given (3 ME/day + Retrovir). The elevation of LDH enzyme level was considered as warning sign and the treatment was ceased twice. In September, the patient was treated by another cytostatic regime, the CAVP (Cyclophosphamid, Adriablastin, Vincristin, Prednisolon) scheme; the skin lymphoma showed regression and the gastric bleeding stopped as well. In November, left sided peripheral facial paresis developed and the patient was given intrathecal Methotrexate, Alexan and Diadreson treatment. Subsequent cytostatic courses were performed in November and December. Chest X-ray already showed lung infiltration the size of a finger pad. The patient had high temperature on several occasions and *Pseudomonas* was cultured from his blood. Leucopenia also developed, and therefore Neupogen as well as antibiotics were introduced. Despite the listed treatments, the patient died in the beginning of January 1996. Upon the request of the family autopsy was not performed.

### Discussion

Neoplasias of the testis are rare urological tumors. In Hungary less than 300 new cases are diagnosed annually – from which the number of lymphomas is low (2,6–8,4%). The testes are primarily involved in 0,2–0,3% of lymphomas.<sup>1</sup> Adolphs et al<sup>1</sup> found 11 cases from 252, Bach et al<sup>2</sup> found 26 from 1508. Between 1976 and 1989, 32 lymphomas of the testis were registered in Great Britain,<sup>3</sup> from which 5 cases were bilateral. Bilateral lymphomas occur with higher frequency than any other histological type of testicular tumor.<sup>4</sup> From the 51 patients of Read<sup>5</sup> with testicular lymphomas, 8 were bilateral cases. In Hungary, Frang et al<sup>6</sup> reported a bilateral testicular lymphoma.

The symptom of testicular tumors is the enlargement of the testis, with rapid progression. Sussmann et al<sup>7</sup> analysed the data of 37 testicular lymphoma cases, finding metachronic involvement in 35 and synchronic tumor of the testis in 3% of the studied cases.

The first step of therapy is high orchidectomy. In case of generalized lymphoma radiotherapy followed by chemotherapy (VAP) is suggested.<sup>6,8</sup> The survival rate in cases of lymphomas only involving the testis is a mere

40%. From the patients of Sussmann et al,<sup>7</sup> the 2 and 5 years survival rate was 30 and 20%, respectively. The majority of the patients have poor prognosis.<sup>9</sup> The most important prognostic factor of testicular lymphomas is the clinical stage.

In our case the tumor showed rapid progression, appearing in the other testis within a short time. The disseminated lymphoma responded to radio- and chemotherapy for only a short period and the patient died within 11 months from the appearance of the first symptom.

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