Very Late Relapse in Hodgkin’s Disease

Imdat DİLEK1
Günhan GÜRMAN2
İşinsu KUZU3
Selim EREKUL3

Department of 1Hematology, Faculty of Medicine, University of Yaşbin, Van-Turkey
Departments of 2Hematology–Oncology, 3Pathology, Faculty of Medicine, University of Ankara, Ankara-Turkey

The use of modern therapeutic modalities in the treatment of Hodgkin’s disease (HD) has led to a high rate of long–term survivors in complete remission (CR) (1–8). The great majority of relapses after treatment for early–stage HD are observed within 4 to 5 years after completion (2). The occurrence of late relapse is significantly related to stage I disease and nodular sclerosis histologic subtype (9). The occurrence of late relapse is extremely rare after 25 years of CR (4,6). Here we report a case of HD relapsing 29 years after the initial radiotherapy. The first diagnosis was made in 1969 and the patient was observed until April 1997 at the Department of Hematology–Oncology at the University of Ankara, İbn–i Sina Hospital.

A 50 year–old male patient was admitted to the hospital. He complained of night sweating for one month. When he was 20 years old, he was presented with a left cervical lymphadenopathy in 1969. He had no other symptoms, and other physical findings were unremarkable at that time. The histopathologic diagnosis of the biopsy specimen taken from the enlarged lymph node was lymphocyte predominant (LP) type HD. Histopathologic examination showed the lymph node architecture to be effaced. Numerous mature lymphocytes, scattered L&H cells and atypical mitosis, rarely mummified cells and Hodgkin cells were observedd in the lymph node (Fig. 1a). The clinical stage was IA, and the patient received regional irradiation and achieved CR with this radiotherapy. He remained in CR until April, 1997.

During this recent admission, a physical examination revealed hepatosplenomegaly. The liver and spleen were palpable below the costal margin. Pulmonary x–ray radiography showed mediastinal enlargement. A CAT scan examination of the abdomen and thorax revealed an enlarged spleen and liver, and periaortic, subcarinal, paraesophageal and periportal lymphadenopathies. The hematocrit was 37 percent, and other blood parameters, urine and bone marrow biopsy were normal. At this time, mediastinoscopic biopsy was done and the histopathologic diagnosis was LP type HD after light microscopic (Fig. 1b) and immunohistochemical examination. In immunophenotyping examination of both biopsy specimens of neoplastic cells (L&H cells and Hodgkin cells), a positive reactivity was found for CD20, CD45 and CD30 (Fig. 2), but a negative reactivity for CD15 and CD45RO. With a systemic chemotherapy (MOPP) regimen, the patient achieved a second CR.

Patients who are presented with early–stage HD are likely to achieve a complete remission, and can be cured with current modern therapies (2). Late recurrences of HD 10 years after the achievement of CR are very uncommon and few cases have been reported in the literature (1, 3–6, 8). Our patient relapsed 29 years after the achievement of CR.

The early stage disease and histology of nodular sclerosis at initial diagnosis are reported to be significantly correlated with the risk of late relapse (9). Three other factors in addition to initial treatment are
correlated with an increased risk of late relapse: male
gender, presence of B symptoms, and mediastinal
involvement (1). In 1969, our patient apparently had
early stage disease with no B symptoms, male gender and
the LP subtype.

The administration of radiotherapy may have favored
the local control of the disease more successfully. Most
patients with stage I and II disease have late relapse
primarily in unirradiated nodes, whereas patients with
stage III and IV disease have late relapse in previously
irradiated nodes or extranodally (9). The tendency of
patients treated with chemotherapy alone to relapse at
the sites of previous involvement has been described by
Young et al. (7). The patient reported by Hung et al. was
treated with initial regional radiotherapy and relapsed
from a different site, as did our case (6). Although the
presentations of both our patient and theirs were early
stage (IA) LP type HD. Their patient relapsed with
lymphocyte depletion subtype, but our patient relapsed
with LP type HD, which was confirmed
histopathologically and immunohistochemically.

Whether these very late recurrences in patients
treated for HD represent a reappearance of the primary
disease or a neoplasm has not yet been established (1).
The clinical characteristics and the data on sporadic cases
of very late relapses in the literature are shown in Table
1. Just as in our case, in the majority of patients with very late relapses after 25 years, the secondary histologic subtype was the same as the primary subtype (Table 1). This recurrence of the same histologic type may support the hypothesis of reappearance of the primary disease. In contrast, Lee and Spittle's patient had an early stage (IA) LP type HD relapsed with a different subtype (4). However, LP type HD may be associated with late relapse after radio therapy. Five cases reported by Anselmo et al. were previously treated with combination chemotherapies, and three of them relapsed at 120 months, one at 170 months and one at 191 months. All achieved a second CR with rescue therapy and none have relapsed since (1). Our patient was treated with combined chemotherapy (MOPP) and achieved second CR, and is still disease free at present.

In conclusion, extremely few reports demonstrate the necessity of prolonged follow-up of patients with HD, and early detection of recurrence may improve response to treatment for HD.

<table>
<thead>
<tr>
<th>Reported by</th>
<th>Stage</th>
<th>Histology</th>
<th>Recurrent-histology</th>
<th>DFI–years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green et al8</td>
<td>IA</td>
<td>MC</td>
<td>MC</td>
<td>22</td>
</tr>
<tr>
<td>Hung et al6</td>
<td>IA</td>
<td>LD</td>
<td>LD</td>
<td>29</td>
</tr>
<tr>
<td>Lee, Spittle4</td>
<td>IA</td>
<td>LP</td>
<td>LBCL</td>
<td>32</td>
</tr>
<tr>
<td>Our case</td>
<td>IA</td>
<td>LP</td>
<td>LP</td>
<td>29</td>
</tr>
</tbody>
</table>

MC= Mixed cellularity LD= Lymphocyte depletion; LP= Lymphocyte predominance; LBCL= Low grade B-cell lymphoma, DFI= Disease free interval.

References

495


