Multidisciplinary approach in a HIV/HCV-positive patient with liver metastases by colorectal cancer in the HAART era

In December 2002, a 44-year-old Caucasian woman HIV-positive since 1997, on highly active antiretroviral therapy (HAART) since 1999 and hepatitis C virus (HCV) co-infected, was diagnosed with an adenocarcinoma of the recto-sigmoid junction (CRC). The thorax–abdomen CT scan was negative for distant metastases and the carcinoembyonic antigen (CEA) serum level was 37 (range 0–5). The patient underwent left colectomy in February 2003. Pathologic diagnosis was moderately differentiated CRC, infiltrating the muscular layer with metastasis in three regional lymph nodes.

In April 2003 the patient was treated with adjuvant radiotherapy, interrupted after 2 weeks for grade 2 proctitis. In November 2003 she was referred to the Aviano National Cancer Institute (Italy) for the presence of three hepatic lesions. Hepatic function was normal, and histologically she was suffering only with chronic hepatitis. Results of the laboratory investigations are shown in Table 1. Her general performance status was 0 (Eastern Cooperative Oncology Group scale) and we therefore decided on a ‘neo-adjuvant’ approach with FOLFOX4-regimen [1]. HAART was maintained during chemotherapy treatment.

After three chemotherapy cycles, the abdomen CT scan revealed a partial remission, CEA level was dramatically decreased and the PET/CT FDG scan was negative for extra-hepatic metastases. In April 2004 she underwent a segmentectomy of the VIII and sub-segmentectomy of the VII. The histological examination confirmed metachronous metastases by CRC.

From April to May 2004 she underwent two cycles of FOLFOX4 with ‘adjuvant’ intent. Every other 3 months hepatic ultrasonography or an alternative thorax/abdominal CT scan was performed following physical examination with tumor markers and blood chemistry tests. The patient was in complete remission after 19 months, HIV infection was under control and, moreover, no progression of HCV infection was observed.

There is little evidence in the literature of CRC in HIV-positive patients. In fact, CRC has been reported in only eight HIV-infected patients [2, 3]. Overall, in these eight patients, young age, advanced stage at diagnosis and poor prognosis appeared to be common characteristics. Within the GICAT (Italian Cooperative Group on AIDS-Tumors), we evaluated 17 patients with HCV infection and CRC, comparing their epidemiological and clinical characteristics with a group of HIV-negative patients. From this analysis it appears that HIV-positive patients develop cancer at an earlier age and have a much more advanced stage than in the general population [4].

The liver is the most common, and often the only, site of metastases in CRC patients. The median survival of untreated patients ranges from 6 to 18 months. Using current criteria, resection can be carried out in only 10%–20% of patients with CRC liver metastases. Resection is the only hope of long-term survival, with a 30%–40% rate at 5 years [5].

Our experience showed that HIV infection did not prevent a patient affected by CRC liver metastases to undergo an efficacious treatment including chemotherapy and liver surgery. Moreover, this case suggests that, in the HAART era, the best multidisciplinary approaches, including chemotherapy, surgery and radiotherapy, can be offered to HIV patients with advanced cancer every time they have a good performance status and an efficacious control of HIV infection or if valid options of antiretroviral therapy are still present.

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Table 1. Results of laboratory investigations

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<tr>
<td>CEA (range 0–5)</td>
<td>37</td>
<td>385.1</td>
<td>15.9</td>
<td>0.6</td>
<td>0.91</td>
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<tr>
<td>CA 19–9 (range 0–35)</td>
<td>28.1</td>
<td>299.5</td>
<td>16.6</td>
<td>5.4</td>
<td>23</td>
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<tr>
<td>HIV viral load</td>
<td>1721</td>
<td>1324</td>
<td>&lt;50</td>
<td>&lt;50</td>
<td>&lt;50</td>
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<tr>
<td>CD4, µl (%)</td>
<td>215 (29)</td>
<td>238 (31)</td>
<td>264 (41)</td>
<td>320 (38)</td>
<td>432 (31)</td>
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<tr>
<td>CD8, µl (%)</td>
<td>375 (48)</td>
<td>384 (50)</td>
<td>297 (46)</td>
<td>389 (45)</td>
<td>475 (49)</td>
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references


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