Role of endosonography in rectal lymphoma

We describe a case of rectal localization of non-Hodgkin's lymphoma and emphasize how endorectal ultrasonography can help hematologists and oncologists in the management of the disease. This technique is useful in local staging of the lesion, in monitoring response to therapy and in early detection of possible relapses of the tumor just as it is in gastric lymphoma.

Sir,

Endoscopic ultrasonography (EUS) is widely applied in gastric lymphomas: it helps to distinguish lymphoma from carcinoma,[1] to detect the degree of loco-regional involvement,[1,2] to monitor response to radio-chemotherapy[3,4] and to identify a recurrences[4] early during follow-up evaluation. EUS could give the same informations when applied to the study of rectal lymphoma. Nevertheless, only few studies exist in literature[5,6] on this subject, probably because this neoplasm is less frequently localized to the rectum.

In this paper we describe a case of non-Hodgkin's mucosa-associated rectal lymphoma. The aim of our work is to emphasize the role of EUS in the diagnosis and therapeutic planning of rectal lymphoma.

A 45-year old man was referred to our hospital complaining of repeated rectal bleeding, mucous diarrhea and weakness lasting several months. At rectal examination the ampulla was completely occupied by a circumferential polypoid elevation, irregular in surface, friable, easily bleeding. We performed EUS, using biplanar, linear and sectorial probes. The rectal mucosa appeared markedly thickened, diffusely hypoechoic and raised in multiple polypi-like folds. The submucosa and the muscularis propria were normal. A great number of enlarged lymph nodes were scattered in the perirectal fat (Figure 1). Endoscopic biopsies showed a low-grade mucosa associated with non-Hodgkin's lymphoma, with small cleaved type B-cells (immunophenotype CD20/L26$^+$, CD45RA/4KB5$^-$, CD5$^-$, CD3$^-$, CD45R0/UCHL1$^-$, CD4). The whole staging revealed widespread disease in the bone marrow with lymph node involvement both above and below the diaphragm and diffuse lymphomatous lesions in the stomach and in the colon. After chemotherapy (CVP and CHOP), the thoraco-abdominal CT showed only some mesenteric lymph nodes at the upper limits of normal size; gastric and colic endoscopic patterns were normal. EUS showed regression of the polypi-like folds and near-normal thickness of rectal mucosa. However, adenopathies, though smaller, were still visible in the perirectal fat. Four months later the patient, whose general condition was good, reported some mucous bloody discharge. Endorectal ultrasonography detected an important recurrence. The mucosa was very thick, markedly hypoechoic, again raised into giant folds; a great number of enlarged lymph nodes were visible in the perirectal fat. Endoscopic biopsies showed persistence of lymphoma. High-dose chemotherapy was therefore started following Gerhartz's schedule. After every therapeutic cycle EUS demonstrated continuous reduction in thickness of the rectal mucosa until normalization at the end of the treatment. To date, 2 years after the diagnosis, endosonographic follow-up shows a normal rectal wall (Figure 2). The whole staging is also normal. Our report demonstrates that EUS can be an excellent

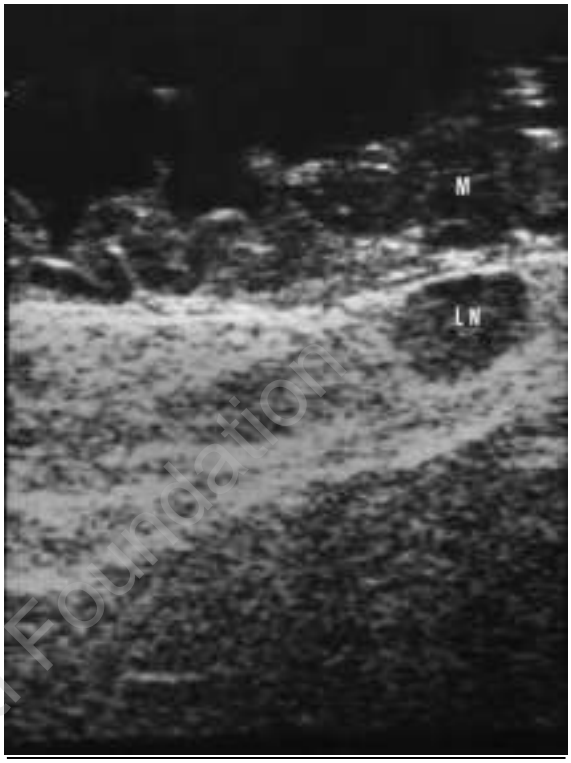

Figure 1. EUS at first diagnosis (Aloka UST-664, 5/7.5 Mhz). The mucosa (M) appears diffusely thickened and risen in giant folds. A large malignant lymph node (LN) is visible in the perirectal fat.

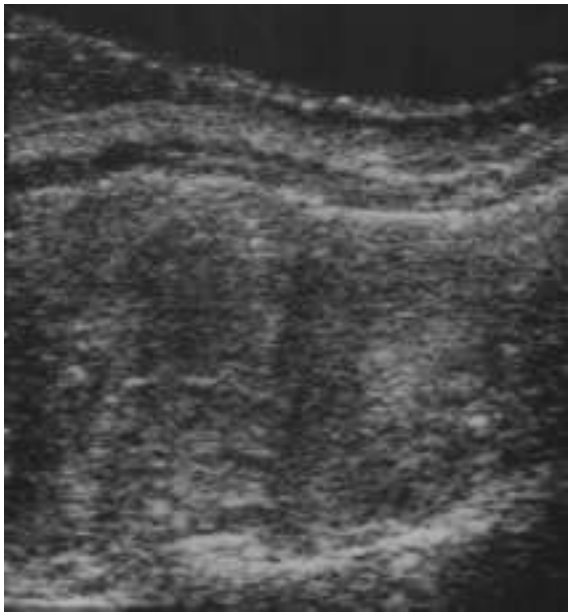

Figure 2. Complete normalization of the rectal wall.

means of diagnosis in rectal lymphoma. It is also able to monitor the therapeutic response to the drug treatment and, during follow-up, to detect an unsuspected recurrence of the rectal disease.

To conclude we think that EUS should be performed routinely in the study of rectal lymphomas just as it is for the more common gastric lymphomas.

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Hepatitis C virus infection and a new association with extrahepatic disease: multiple myeloma

Hepatitis C virus (HCV) is associated with various types of tumors. Our study examines the prevalence of hepatitis C infection in myeloma and compares the findings with a control group. Our results show a prevalence of HCV of 32% in the myeloma patients compared with a prevalence of 9% in the control group, with an odds ratio of 4.3, CI 95% 1.8-11.0 (*p*=0.001).

Sir,

Apart from hepatic cancer, hepatitis C virus is associated with thyroid tumors, and diverse processes originating from B-clonal lymphoid proliferation, such as mixed cryoglobulinemia and B-cell non-Hodgkin's lymphomas.[1-3] It is therefore possible that the virus favors the onset of other tumors correlated with immune disorders.[4] With these considerations in mind we evaluated the prevalence of hepatitis C in 41 patients (mean age, 62±9 years) suffering from multiple myeloma (23 men and 18 women) who were hospitalized in our Institute from 1997 to 1998. Patients who had no history of cancer or autoimmune disease but who were hospitalized in the same period as the cases were used as controls. They included 120 subjects (mean age, 59±10 years), 47 men and 73 women, most with the following diagnoses: breast dysplasia (33), fibroma or myoma of the uterus (26), prostate adenoma (22), hernia (8), lipomas (10), prostate hypertrophy (11), fistulas (6), moles (4). The following data were collected at recruitment: date of admission, date of birth, histologically confirmed diagnosis, diagnosis-age (grouped as ≤ 55, >55), marital status. The serologic diagnosis of hepatitis C virus infection was tested with a third generation ELISA test (Ortho Diagnostic System, Raritan, NJ, USA) and samples yielding positive results were re-tested with polymerase chain reaction (PCR, Amplicor qualitative, HCV test, Roche Diagnostic). The relationship between multiple myeloma and HCV infection was assessed by means of odds ratios (OR) and corresponding 95% confidence intervals. Unconditional logistic regression equations included terms for age, sex and marital status.

Our results showed a prevalence of HCV infection of 32% in patients with myeloma compared with a prevalence of 9% in the controls. After controlling for both age and sex the odds ratio was 4.3, CI 95% 1.8-11.0 (*p*=0.001). The prevalence of HCV infection in male multiple myeloma patients was 30% and in female patients 33%. This compares with prevalence of 7% in male controls and 13% in female controls. For the variable age, we found that the prevalence of HCV infection in over 55-year olds was 36% in those with myeloma and 8% in the controls (see Table 1).

Multiple myeloma is a relatively rare cancer (affecting older individuals) and its causes are still unknown;[5] the relationship between the viral agent (HHV-8) and multiple myeloma is controversial, but some studies have shown a positive correlation.[6] Moreover a high prevalence of HCV infection, not associated with mixed cryoglobulinemia, was detected in patients with multiple myeloma.[3]

The mechanism responsible for the oncogenetic role of HCV is not well understood. Despite an active immune response by the host, HCV has the ability to escape this response. It is believed that the quasi-species nature of HCV is one of the major mechanisms allowing the virus to develop chronic infection and co-factors influencing the outcome of the diseases, such as age, gender, environmental and immunologic genetic factors may play important roles.[4,7] HCV is a major health problem throughout southern Italy, with a prevalence of 12.6%;[8] the same area also has a high mortality rate for liver cancer,