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Primary Gastric Lymphoma

T. Economopoulos, C. Alexopoulos, N. Stathakis, E. Papageorgiou, D. Karakassis, S. Styloyannis, J. Dervenoulas, S. Tsussis and S. Raptis

PRIMARY GASTRIC LYMPHOMA is the most common site of extranodal lymphoma [1–4]. The best management is inconclusive. We report our experience in primary gastric lymphoma treated with combination chemotherapy and surgery.

44 consecutive cases fulfilling the criteria of this lymphoma [5] were diagnosed and treated in our units between January 1977 and March 1988. The histological classification was made according to the modified Rappaport classification [6]. Median follow-up for the patients was 28.5 months (range 12–120). There were 26 males and 18 females, median age 56 (range 21–74).

All patients were extensively investigated and staged [7]. 20 patients received cyclophosphamide 600 mg/m^2 on days 1 and 8, vincristine 2 mg on days 1 and 8, and prednisone 30 mg/m^2 on days 1–8, and 24 patients the same regimen plus doxorubicin (CHOP) 30 mg/m^2 on days 1 and 8. 40 patients (91%) underwent exploratory laparotomy, while 4 (9%) were treated after a diagnosis of lymphoma was made on the basis of endoscopic biopsy. 6 courses were given in all responding patients before restaging. Patients in documented complete remission (CR) discontinued treatment. Patients in partial remission (PR) were given another 3 courses of the same regimen. If CR was achieved, chemotherapy was discontinued, while patients in PR were given another treatment. No patients received preoperative or postoperative irradiation.

A gastric resection with curative intent was possible in 34 out of 40 patients (85%) who underwent laparotomy. Gastrectomy was total in 6 and subtotal in 28. Tumour was considered unresectable in 6 (15%) cases. Final histology was reported as diffuse in 41 (24 histiocytic, 12 lymphocytic, 5 mixed) and nodular lymphocytic in 3. The staging results showed that 27 patients (61%) had limited disease (stages I, II_1A, II_1B) and 17 (39%) disseminated disease (stages II_2B, IV). In 20 cases (45%) the tumour was over 10 cm in size and in 24 (55%) under 10 cm. Depth of invasion of the gastric wall had reached the mucosa and submucosa in 8 cases, muscularis propria in 11, and serosa without invasion of contiguous structures in 15.

Detailed restaging after 6 courses documented 32 patients (73%) in CR and 7 (16%) in PR, while 5 patients failed to respond (NR). Among the 34 patients who underwent gastrectomy 28 (82%) achieved CR, 3 (9%) PR, and 3 had progressive disease. In contrast only 4 (40%) among the non-resected tumour group achieved CR, 4 (40%) PR, and 2 (20%) NR. Among the CRs 5 have relapsed to date (3 had had gastrectomy and 2 had not). Median survival of the whole group has not been reached yet. Actuarial analysis predicts that the median will be over 6 years. Of the CRs 95% are predicted to be alive at 6 years. Median survival of PRs and NRs are 12 and 5 months, respectively (Fig. 1). Patients treated with gastrectomy plus chemotherapy demonstrated significantly better survival ($P < 0.05$ logrank test) than those treated with chemotherapy alone. Patients with limited disease survived longer than those with advanced disease ($P < 0.01$). Similarly, patients with tumours under 10 cm had better survival ($P < 0.05$) than those with tumours over 10 cm. No significant correlation was demonstrated between depth of invasion and survival.

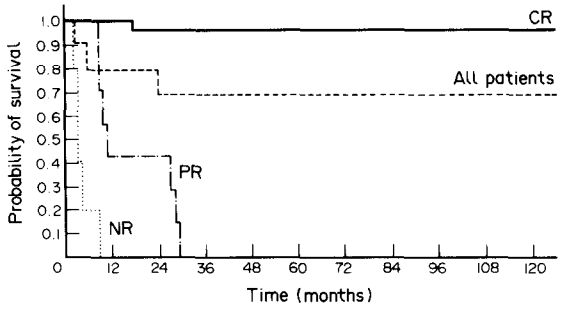

Fig. 1. Actuarial survival (Kaplan–Meier) of 44 patients with primary gastric lymphoma according to response. All patients = 31 alive, 13 dead; CR = 31 alive, 1 dead; PR = 7 dead; and NR = 5 dead.

Chemotherapy alone or in combination with "curative" surgery and/or irradiation has been rarely used in limited primary gastric lymphoma (3, 8, 9), most probably because complications such as perforation or gastrointestinal bleeding are thought to be common during chemotherapy. However, none of our 34 patients treated with chemotherapy after gastrectomy had perforation or bleeding. "Curative" surgery should be always attempted in patients with primary gastric lymphoma and postoperative chemotherapy is essential in all patients found to have more than stage I disease.

Correspondence to T. Economopoulos.
T. Economopoulos, N. Stathakis, E. Papageorgiou, D. Karakassis, S. Styloyannis, J. Dervenoulas, S. Tsussis and S. Raptis are at the Second Department of Internal Medicine, Propaedeutic, Athens University, Greece and C. Alexopoulos is at the Department of Medical Oncology, Evangelismos Hospital, Athens, Greece.

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