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The results of treatment in patients with non-Hodgkin's lymphoma (NHL). The analysis of prognostic factors and evaluation of the role of radiotherapy (RT)

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Purpose: The estimation of the results of treatment and evaluation of the role of RT in patients with NHL.

Methods: Between 1986–95 120 patients (36 women and 84 men) with intermediate (76 pts.) or high (44 pts.) grade NHL were treated in the Centre of Oncology in Kraków. There were 7 pts. in stage I, 18 pts. in stage II, 41 pts. in stage III, and 54 pts. in stage IV (Ann Arbour classification). "B" symptoms were observed in 38 patients (33%), and in 33 pts. bulky disease was found. The International Prognostic Index (IPI) was defined in 103 patients: 8 pts. were in low, 34 pts. - in low/intermediate, 32 pts. - in high/intermediate, and 29 pts. - in high risk group. All patients were treated with chemotherapy (CT) with MACOP-B (24 pts.) or VACOP-B (96 pts.) regimens. RT was applied in 37 pts. An indication for RT included: initially bulky disease, partial response (15 pts.) after CT and extranodal localisation. The median dose of RT was 36 Gy.

Results: The 5-year overall survival rate for whole group was 45.7%, and 5 year relapse-free survival rate was 38.4%. The univariate analysis confirmed prognostic significance of: performance status, III and IV stage of diseas, extranodal localisation, high level of lactate dehydrogenase, IPI, anemia. In multivariate analysis the significant prognostic factors for overall survival were: III and IV stage of disease, high level of lactate dehydrogenase, and for relapse-free survival: extranodal localisation, high level of alpha-2-globulin, which was positive prognostic factor.

The higher relapse-free survival was observed in group of patients who received combined treatment (CT + RT): 51% vs. 32.4%. The favourable effect of RT on treatment results was observed especially in patients: with bulky disease, III or IV stage of disease, high risk group (IPI), in pts. with only partial response after CT.

Conclusions: Results indicate that RT after CT may improve relapse-free survival in high risk patients with intermediate or high grade NHL.

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Six-week rituximab monoclonal antibody therapy for chemotherapy-pretreated advanced low-grade non-Hodgkin's lymphoma: Efficacy and toxicity of a phase II study

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Purpose: Previous clinical trials demonstrated, that four or eight weekly infusions of Rituximab in patients with relapsed or refractory low-grade non-Hodgkin's-lymphomas (NHL) were well tolerated and had significant clinical activity with overall response rates of 40–60%. We investigated the efficacy and toxicity of six weekly doses of Rituximab in prolonged chemotherapeutically pretreated relapsed or refractory low-grade NHL-patients.

Methods: After pretreatment (median duration 33 months) with different cytostatic drugs (median 2, range 1–18) 66 patients with low-grade NHL (histologic subtypes: CLL n = 12, immunocytic n = 30, follicular n = 21, mantle cell n = 1, others n = 2) received six weekly doses of 375 mg/m^2 of Rituximab.

Results: All patients are evaluable for toxicity, 48 patients for response. The overall response rate was 37% (12/48 CR, 25%, 17/48 PR, 35%) with a median progression free survival of 16 months. WHO-grade I (0–9%) or II (0–4%) adverse events were the majority of reported toxicities and occurred most frequently with the first infusion.

Conclusions: The efficacy and safety profile achieved in this phase II study of six weekly doses of Rituximab compares favorably with those seen with four or eight weekly infusions in pretreated low-grade NHL. Rituximab represents an important a gent for a specific, low toxic treatment of B-cell-NHL and looks very attractive to be incorporated in primary and/or secondary chemotherapy protocols.

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Phase II study of palliative low-dose local radiotherapy in disseminated indolent non-hodgkin's lymphoma (INHL) and chronic lymphocytic leukaemia (cll)

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Introduction: INHL and CLL are highly sensitive to radiotherapy. Previous retrospective studies had shown high response rates of local palliative radiotherapy of 4 Gy in 2 fractions, which prompted this prospective phase II trial of the palliative effect of this regimen in patients with disseminated INHL or CLL.

Methods: 22 patients (11 males, 11 females, median age 62 years, range 30-89 years) with disseminated INHL (15 pts.) or CLL (7 pts.) were treated with the aim of achieving palliation from localised lymphoma masses with local low-dose radiotherapy, 2 Gy x 2 over 3 days. The patients were treated to a total 31 different sites. 17 of the patients had previously been treated with chemotherapy. The median observation time after start of radiotherapy was 8 months (range 3-26 months).

Results: All patients and all irradiated sites were evaluable for response. 18 of the 22 patients responded to the treatment, corresponding to an overall response rate (RR) of 82%, 12 patients (55%) achieved a complete remission (CR), 5 patients (22%) a partial remission (PR), and one patient had a CR at 3 sites and a PR at 1 site. 27 of the 31 irradiated sites responded to treatment corresponding to an overal RR of 87%, in 20 sites (65%) a CR was achieved, in 7 sites (22%) a PR. Patients with disseminated INHL had an overall RR og 87% (74% CR, 13% PR); patients with CLL had an overall RR of 71% (29% CR, 42% PR). The median duration of response has not yet been reached. The estimated percentage of responding sites still in remission after one year is 90%. None of the patients had any side effects of the treatment.

Conclusion: Low-dose irradiation (4 Gy in 2 fractions) is a highly effective palliative treatment of localised lymphoma masses in patients with disseminated INHL and CLL. The treatment has minimal side effects.

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Radiation therapy results for primary orbital non-Hodgkin's lymphoma

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Purpose: This study is to report local control rate, pattern of failure, and ocular morbidity after radiation therapy (RT) for primary orbital non-Hodgkin's lymphoma (PONHL).

Methods: Retrospective analyses were done on 34 orbits (in 29 patients) with PONHL who were given definitive local RT from March 1995 to August 1999 at Samsung Medical Center. All patients received RT with either single anterior field or paired wedge fields using 6~20 MeV electrons or 4~6 MV photons. In 26 cases, the lens was shielded either by custom-made block or shielding contact lens, while the entire lens was included within the radiation volume in 8 cases. The fractionation schedule was to give five daily treatments per week and the fractional radiation dose was either 1.8 or 2 Gy. The median total radiation dose to the lesion was 36 Gy (range: 26~45 Gy).

Results: There were 13 males and 16 females, and the median age was 40 years (range: 25~87 years). Five of 29 patients had bilateral involvement and thus total 34 orbits were treated. The primary sites of involvement were the retrobulbar area in 13 cases (38.2%), the conjunctiva in 10 (29.4%), the eyelid in 8 (23.5%), and the lacrimal gland in 3 (8.8%). Pathologic types were low grade marginal zone B cell lymphoma in 31 cases (91.2%) and mantle cell lymphoma in 3 (8.8%). After the median follow-up of 45 months (range: 16~74 months), no local recurrence and two distant relapses were observed. One relapse in the stomach found at 28 months of RT was managed with subtotal gastrectomy, and the other in the contralateral facial subcutaneous tissue found at 29 months was managed with local RT. Acute side effects by RT including skin change and keratitis were minimal. Symptomatic late reactions included cataract (3 cases) occurring among 8 cases where lens shielding was impossible, and retinopathy (3 cases)