P01

CLINICAL PREDICTIVE MARKERS IN RITUXIMAB RELATED LATE-ONSET NEUTROPENIA

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Introduction - Purpose : Rituximab related late onset neutropenia R-LON) is defined as neutropenia more than grade 2 or grade 3 up to different soruces) which lasts more than four weeks and can not be explained with any other reason after the last ritıximab dose. The incidence of R-LON is ranges between 3% and 27% in patients with lymphoma. We aimed to identify clinical predictive markers in the development of R-LON.

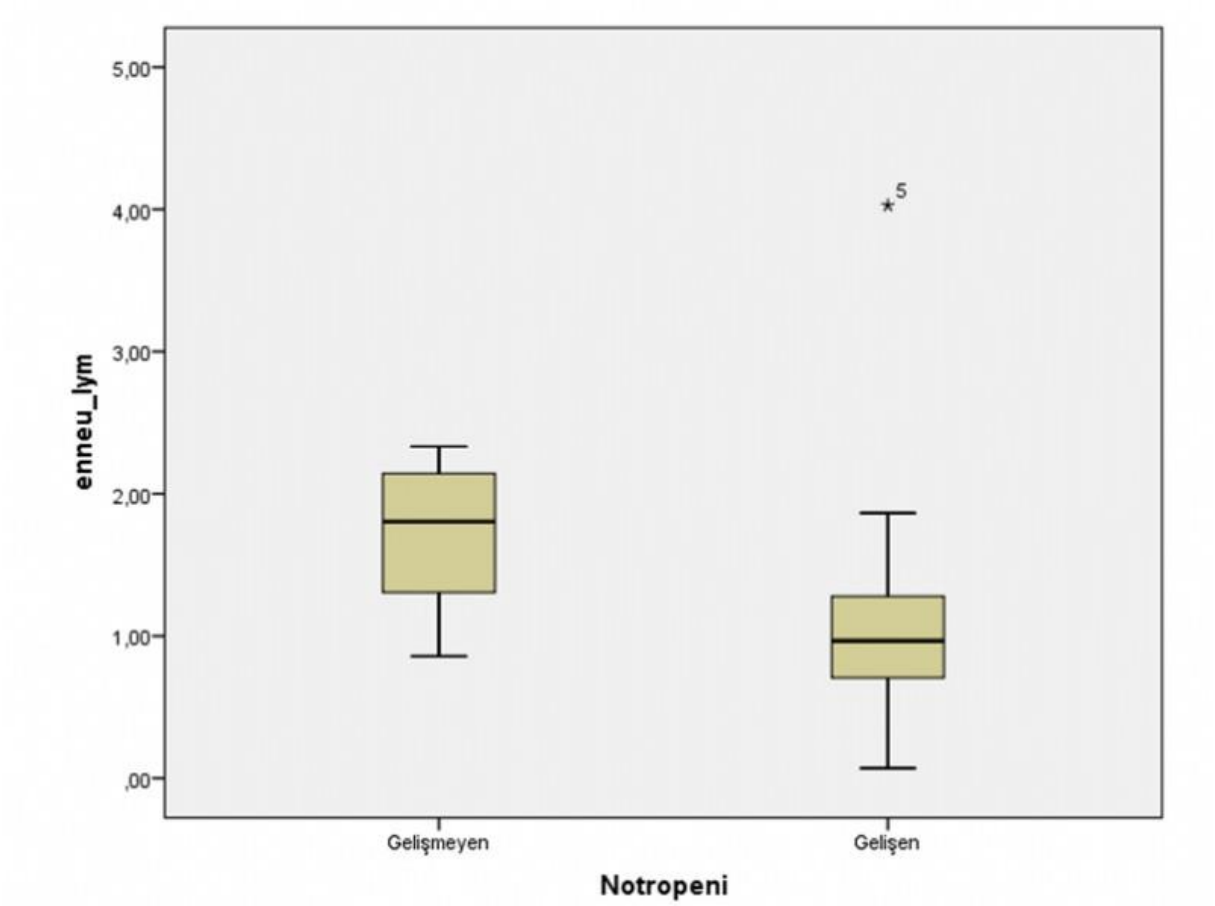
Methods - Tools : Retrospectively, 22 patients with untreated lymphoproliferative malignant disease who were not treated with any other therapy due to underlying underlying disease at least one year other than rituximab therapy, were included in the study. The stages of diagnosis of the patients, pre- and post-treatment beta- 2 microglobulin levels , Erythrocyte sedimentation rate, complete blood count parameters, IPI International Prognostic Index) scores, totaldose of rituximab, Neutropenia grades of patients developing neutropenia, received chemotherapy regimens, usage status of G-CSF prophylaxis under treatment, Lowest level of neutropenia , The time until the lowest level of neutropenia occurs were detected.

Findings : In 5 patients 22%) grade 1, 5 22%) grade 2, 1 4%) had grade 4 neutropenia. The mean duration of neutropenia in Grade 2 was 256 days lowest 119, highest 465 days). The neutrophil level of the patient who developed grade 4 neutropenia was found to be 50 / mm^3 and was detected at day 212, and this patient was the only patient with non- lymphatic organ involvement. There was no statistical correlation between neutropenia and beta 2 microglobulin, sedimentation and IPI scores in patients. Neutrophil-lymphocyte ratios of patients were 1.2 in patients with neutropenia and 1.7 in patients with non-neutropenia, which was statistically significant. P = 0.023)When diagnostic groups were examined, neutropenia was detected in 8 53%) of 15 patients diagnosed with DBBHL deep B-cell lymphoma) and 2 of 2 follicular lymphoma patients had neutropenia. One patient was a mantle cell lymphoma. P: 0.044) Neutropenia developed in all patients receiving G-CSF prophylaxis 5 patients), while neutropenia developed in 6 of 17 patients 35%) who did not receive G-CSF prophylaxis. P: 0.035) The mean total dose of rituximab was 4870 mg in patients with neutropenia and 4162 mg in patients without neutropenia.

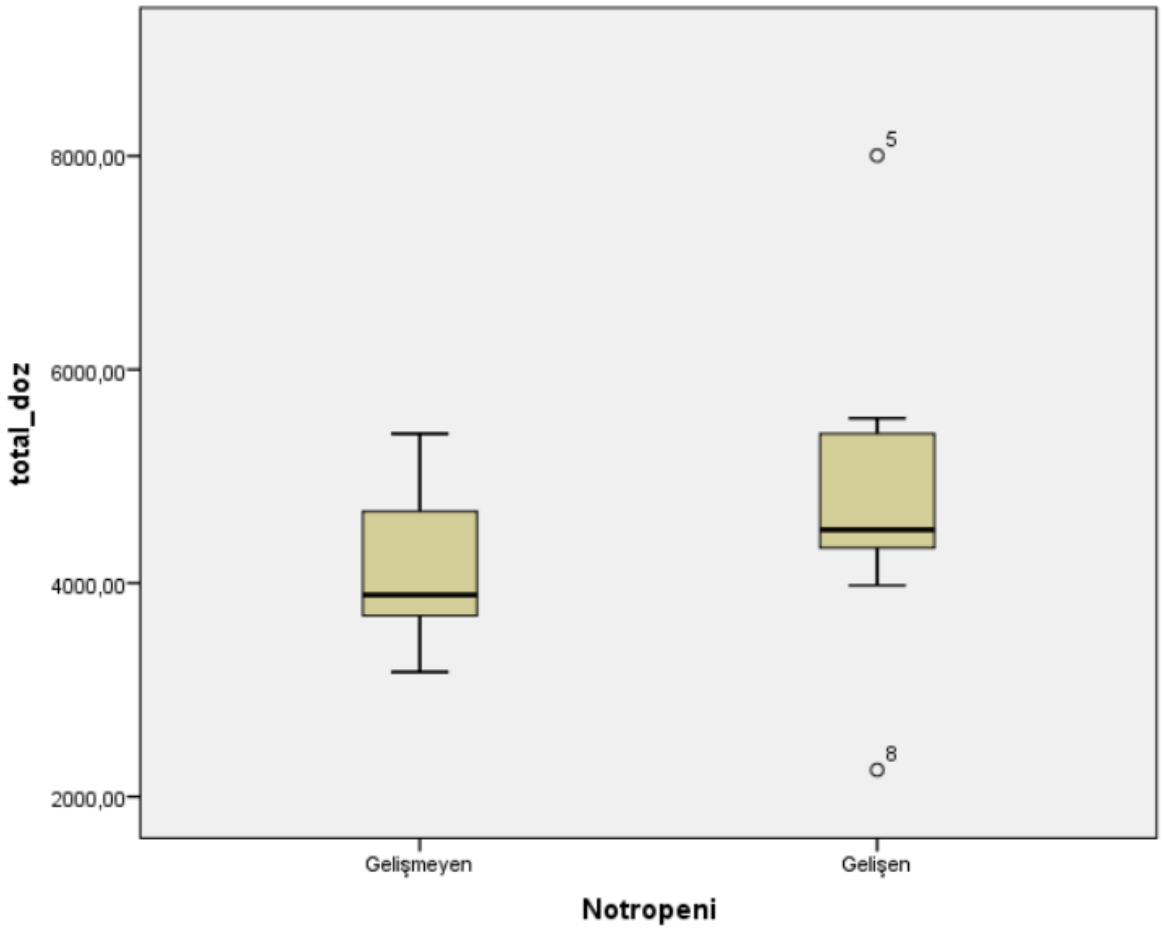
Discussion : The neutrophil-lymphocyte ratios of the patients after therapy , Having received G-CSF prophylaxis during treatment,The primary disease being DBBHL,Extranodal involvement and the total dose of rituximab taken greater than 4000 mg may indicate that the patient will be under R-LON risk in the future . If clinically practical grade 3 and above neutropenia is considered as LON,although the rate of development was determined as 4%, this rate increased to 22% with grade 2 neutropenic patients. After 465 days, a patient with grade 2 neutropenia received a total of 8004 mg rituximab, which may suggest that increased doses increase the risk of developing LON. The lowest rituximab dose was found to be 3978 mg in patients with neutropenia except for this patient.

Keywords: rituximab, lenfoma, nötropeni,

Nötropeni gelişen ve gelişmeyen hastalarda tedavi öncesi nötropeni/lenfosit oranları.



Nötropeni gelişen ve gelişmeyen hastalarda verilen toplam rituximab dozu.



Rituximab ilişkili nötropeni gelişen hastaların özellikleri

Tablo 2. Rituximab ilişkili nötropeni gelişen hastaların özellikleri

Hasta no	**1**	**2**	**3**	**4**	**5**	**6**
Yaş/Cinsiyet	60/F	66/M	33/M	69/F	20/F	62/F
Tanı	DLBCL	DLBCL	DLBCL	DLBCL	DLBCL	FL
Evre	2	4	2	4	4	3*
Verilen tedavi	CHOP-R	Benda-R	CHOP-R	CHOP-R	CHOP-R	FCR
Daha önce verilen tedavi	None	CVP-R	CHOP-R	None	None	None
Yanıt	CR	PR	PR	PR	CR	CR
Tedavi sonrası geçen süre (gün)	310	465	137	251	119	212
Nötropeninin derecesi	Grade 2	Grade 2	Grade 2	Grade 2	Grade 2	Grade 4
Nötrofil sayısı (hücre/µl)	1180	1450	1460	1200	1240	50
Kemoterapide G-CSF proflaksi ihtiyacı	Yes	No	No	No	Yes	No
R-LON'da G-CSF ihtiyacı	No	No	No	No	No	Yes
Tedavi öncesi kemik iliği değerlendirmesi	Normocellular	İnfiltrate	Normocellular	İnfiltrate	İnfiltrate	Normocellular
Toplam rituximab dozu (mg)	3978	8004	4500	4500	4459	4200