Co-Morbidities and Treatment Decisions in Newly Diagnosed CLL Patients Across All Disease Stages in Kurdistan Region-Iraq

soho22 TENTH ANNUAL MEETING

Background

Chronic lymphocytic leukemia (CLL) is one of the most common leukemias in Iraq as in other areas of the world, but with younger age involvement in comparison to the western countries. As in all hematological malignancies, risk stratification is essential for treatment planning.

Objective

To evaluate the daily life activity and co-morbidity effects on choosing appropriate lines of treatment for CLL patients according to cumulative illness rating scale index (CIRS).

Patients & Methods

A cross sectional study conducted in three hematology-oncology healthcare facilities in Kurdistan region – Iraq, throughout three years period, from 1st. January, 2018 till 31st. December, 2020. The CIRS index was used, measuring14 body systems score and calculating the cumulative Index score for each patient. A total of 250 CLL patients were selected and enrolled in this study. The study participants were all newly diagnosed treatment naïve CLL patients admitted to the three above mentioned centers. Diagnosis was according to the International Workshop on CLL (iwCLL). Both demographic and clinical characteristics: age, gender, socioeconomic status, and body mass index; patients staging (Binet stage, Rai staging and CIRS for advanced stage) whichever applied; treatment indication, survival duration and outcome were included.

Results

In this study, 159 patients (63.6%) received treatment, while 91 (36.4%) remained treatment naïve (Wait & Watch). A highly significant association between advanced Rai staging and treatment provision (p<0.001). A similar association was observed between Binet stage C and the treatement group (p<0.001). A Weak but statistically non-significant relation was observed between the treatment and non-treatment groups regarding the total CIRS index score (p=0.06).

Table (1): Age and Gender Distribution of The Study Patients

All CLL patients				
	Treatment Group		Non-Treatment Group	
	No.	%	No.	%
Age				
<50 years	27	17.0	11	12.1
50-59 years	35	22.0	19	20.9
60-69 years	52	32.7	37	40.7
70-79 years	32	20.1	19	20.9
≥80 years	13	8.2	5	5.5
Gender				
Male	114	71.7	56	61.5
Female	45	28.3	35	38.5

Table (3): Survival And Outcome of The Study Patients

Variable	Treatment Group		Non – Treatment Group	
Survival			P = 0.2 NS	
<60 months	125	78.6	77	84.6
≥60 months	34	21.4	14	15.4
Outcome			P = 0.007 S	
Alive	126	79.2	84	92.3
Dead	33	20.75	7	7.69
Total	159	63.6	91	36.4

Table 2: Distribution of total CLL patients' Time Lapse From Symptoms/Signs To Diagnosis, staging and CIRS Score

All CLL patients				
Treatment Group			Non – Treatment Group	
Time from symptoms & signs to diagnosis				P = 0.5 NS
	No.	%	No.	%
≤1 month	111	69.8	60	65.9
>1 month	48	30.2	31	34.1
Rai staging				P = <0.001 S
Stage 0	20	12.6	42	46.2
Stage I	20	12.6	12	13.2
Stage II	45	28.3	32	35.2
Stage III	23	14.5	1	1.1
Stage IV	51	32.1	4	4.4
Binet stage				P = <0.001 S
Stage A	47	29.6	71	78.0
Stage B	51	32.1	15	16.5
Stage C	61	38.4	5	5.5
Total CIRS score				P = 0.06* NS
<6	121	76.1	80	87.9
7-12	36	22.6	11	12.1
>12	2	1.3	0	0

Conclusion

The staging and risk stratification of CLL patients is an important initial step in planning their management. Treatment planning of CLL patients in Kurdistan region depends on either Rai and/or Binet staging, however the CIRS was not widely applied yet for further in-depth stratification and disease management.

References

1. Villavicencio A, Solans M, Zacarías-Pons L, Vidal A, Puigdemont M, Roncero JM, et al. Comorbidities at Diagnosis, Survival, and Cause of Death in Patients with Chronic Lymphocytic Leukemia: A Population-Based Study. Int J Environ Res Public Health 2021; 18(2):701.

2. Sant M, Minicozzi P, Mounier M, Anderson LA, Brenner H, Holleczek B,; EUROCARE-5 Working Group. Survival for haematological malignancies in Europe between 1997 and 2008 by region and age: results of EUROCARE-5, a population-based study. Lancet Oncol 2014; 15(9):931-942.

3. Burger JA. Treatment of chronic lymphocytic leukemia. N Engl J Med 2020; 383:460–473.

4. Kipps TJ, Stevenson FK, Wu CJ, Croce CM, Packham G, Wierda WG, et al. Chronic lymphocytic leukaemia. Nat Rev Dis Primers 2017; 3:16096.

5. Sant M, Allemani C, Tereanu C, De Angelis R, Capocaccia R, Visser O, et al; HAEMACARE Working Group. Incidence of hematologic malignancies in Europe by morphologic subtype: results of the HAEMACARE project. Blood 2010; 116(19):3724-3374.

6. Stauder R, Eichhorst B, Hamaker ME, Kaplanov K, Morrison VA, Österborg A, et al. Management of chronic lymphocytic leukemia (CLL) in the elderly: a position paper from an international Society of Geriatric Oncology (SIOG) Task Force. Ann Oncol 2017; 28(2):218-227.

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