E2. CLL PATIENT PROFILE NEEDING TO BE TREATED.

Anca Lupu
Hematology Department, Coltea Hospital, Bucharest

Chronic lymphocytic leukemia (CLL) is the most common leukemia in the Western world with an incidence of 4.2/100.000/year. The incidence increases to >30/100.000 year at an age of >80 years. The median age at diagnosis is 72 years. About 10% of CLL patients are reported to be younger than 55 years.[1]
The median survival from diagnosis varies between 18 months and >10 years. With the new treatment options available, the overall survival of patients with advanced stages has improved. Additional prognostic markers are available to predict the prognosis of patients with CLL, in particular at early stages[2].

Treatment should only be given to patients with active, symptomatic disease. The following conditions define active disease: significant B-symptoms, cytopenias not caused by autoimmune phenomena and symptoms or complications from lymphadenopathy, splenomegaly or hepatomegaly, lymphocyte doubling time of <6 months (only in patients with >30.000 lymphocytes/l) as well as autoimmune anemia and/or thrombocytopenia poorly responsive to conventional therapy.

Treatment of early, stable disease (Binet stage A and B without active disease; Rai 0, I and II without active disease): previous studies have shown that early treatment with alkylating agents does not translate into a survival advantage in patients with early stage CLL.[3]
The standard treatment of patients with early disease is a "watch and wait" strategy. Blood cell counts and clinical examinations should be performed every 3-12 months.
Treatment of advanced, active disease (Binet stage A and B with active disease, Binet stage C; Rai 0-II with symptoms, Rai III-IV): the fitness and co-morbidity of patients need to be evaluated for the choice of the treatment. For assessing the co-morbidity burden, the Cumulative Illness Rating Scale (CIRS) represents a helpful tool.[4]

An improved survival has been demonstrated following first line chemoimmunotherapy with FCR in physically fit patients with CLL.[5] Therefore, in this patient group (physically active, no major health problems, normal renal function) FCR is the standard first-line therapy.
In patients with relevant co-morbidity, chlorambucil seems to be the standard therapy.[6]
Alternatives are dose-reduced purine analog-based therapies (FC, PCR – pentostatin, cyclophosphamide and rituximab) or bendamustine.[7]

New targeted therapies, more active, and a better tolerability profile are expected to get regulatory authorities approval mainly for those unfit patients, elderly and, usually, with co-morbidities.

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