Progression in low-grade B-cell malignancies: clinical benefit of routine periodic screening for symptomatic disease during follow-up

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Introduction

Active surveillance is the recommended strategy for patients with asymptomatic low-grade B-cell malignancies. Periodical follow-up visits take place until the disease progresses to a symptomatic stage warranting treatment. In practice, patients also contact their physician intercurrently when developing symptoms. The aim of this study is to assess current clinical benefit of routine periodical screening.

Methods

Patients with low-grade B-cell malignancies in active surveillance at our hospital during 2017-2021, were reviewed retrospectively with a follow-up until 1st of January 2024. Patients were excluded if treatment started within 6 months after diagnosis or if there were concomitant haematological indications for follow-up.

Results

In total, 393 patients were included. The majority of patients were diagnosed with CLL/SLL (63.9 %) and the other patients had various types of low-grade lymphoma. In our cohort 92 patient progressed to symptomatic disease after a period of watchful waiting. In 43 (47.3 %) of the cases the patient presented intercurrently between 2 planned visits due to a request from the patient for a non-routine check-up. The number of patients progressing over time was very stable with 1-3% of patients progressing per year at both routinely planned or intercurrent visits. The patients who visited our clinic intercurrently with signs of progression more often presented with extranodal pathology ($p = 0.04$). Patients identified as being symptomatic during a routinely planned visit more often had cytopenias ($p = 0.001$). In 89 cases first line treatment was started with a similar overall response rate in both groups (detected during planned vs intercurrent visit 95.3% vs. 94.7% respectively, $p = 0.90$). No major life-threatening presentation of disease or cases of irreversible organ damage occurred in the group that presented intercurrently, with the exception of one case of persisting polyneuropathy due to anti-MAG antibodies associated with a lymphoplasmacytic lymphoma.

Hospital data showed that the total cohort of patients had made 5043 visits to the outpatient clinic. The number of visits needed to detect one case of clinically relevant progression was 104 (95% CI 79-153).

Conclusion

Our data suggest that routine follow-up visits in low-grade B cell malignancies have limited clinical benefit. Almost half of symptomatic patients consult their physician intercurrently. The number of routine periodic screening visits needed to detect one case of symptomatic progression is more than

100. Irrespective of the way of patient presentation, patients had a good response to treatment. In conclusion, this implies that routine periodical follow-up visits is questionable and needs further prospective research. We propose a symptom-driven follow-up strategy to be explored in which patients present at their own initiative when symptoms occur.