

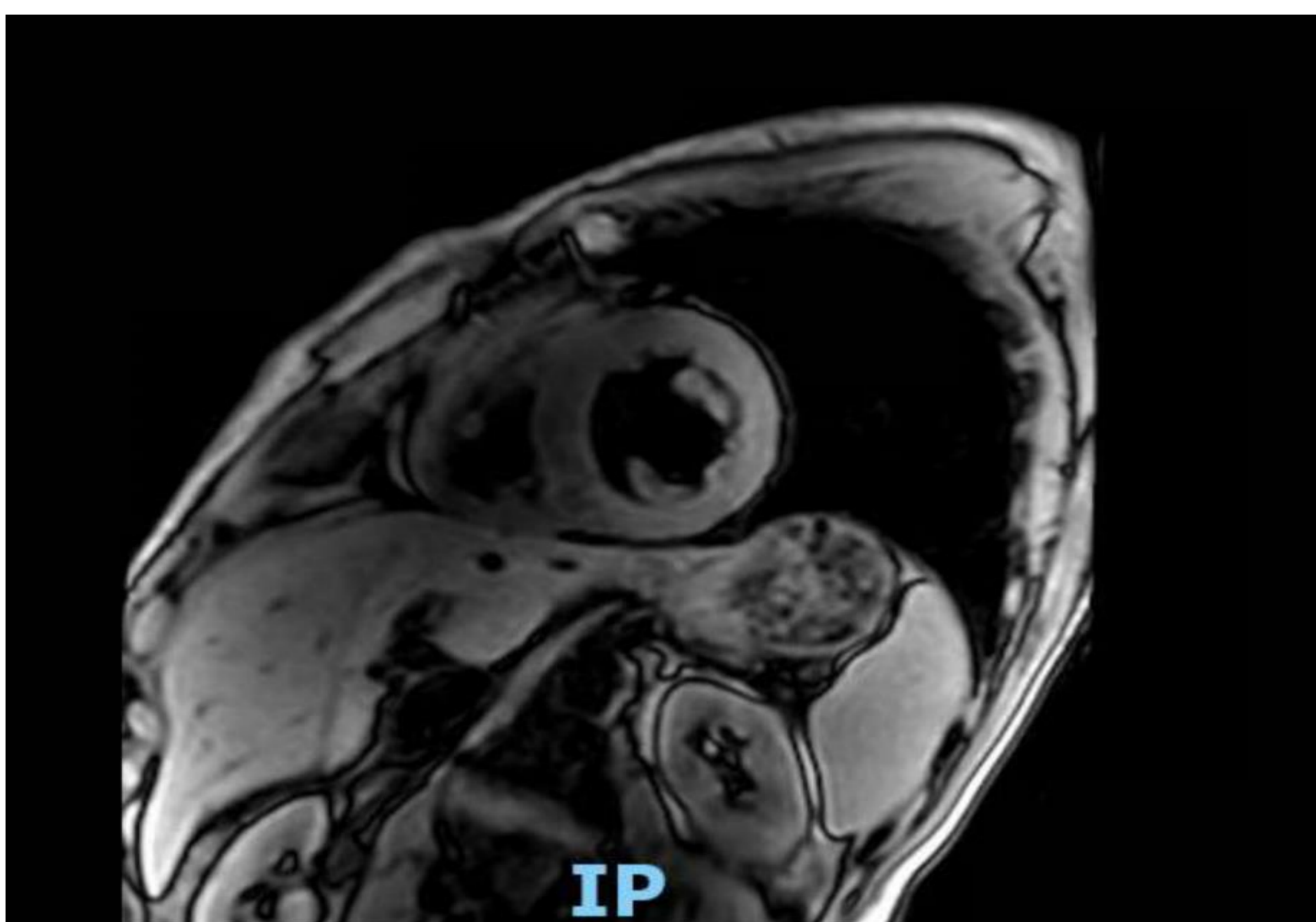
ABSTRACT

Waldenström Macroglobulinemia (WM) is a rare B-cell disorder characterized by a bone marrow infiltration of lymphoplasmacytic cells, along with the identification of an IgM monoclonal gammopathy in the serum. Almost all cases are symptomatic at presentation, with symptoms related to either tumor burden or the IgM paraprotein. Light chain amyloidosis is a rare complication of WM that occurs in 3% of cases and represents less than 5% of AL amyloidoses. Here we report a case of cardiac AL-amyloidosis that achieved a partial organ response after Daratumumab therapy.

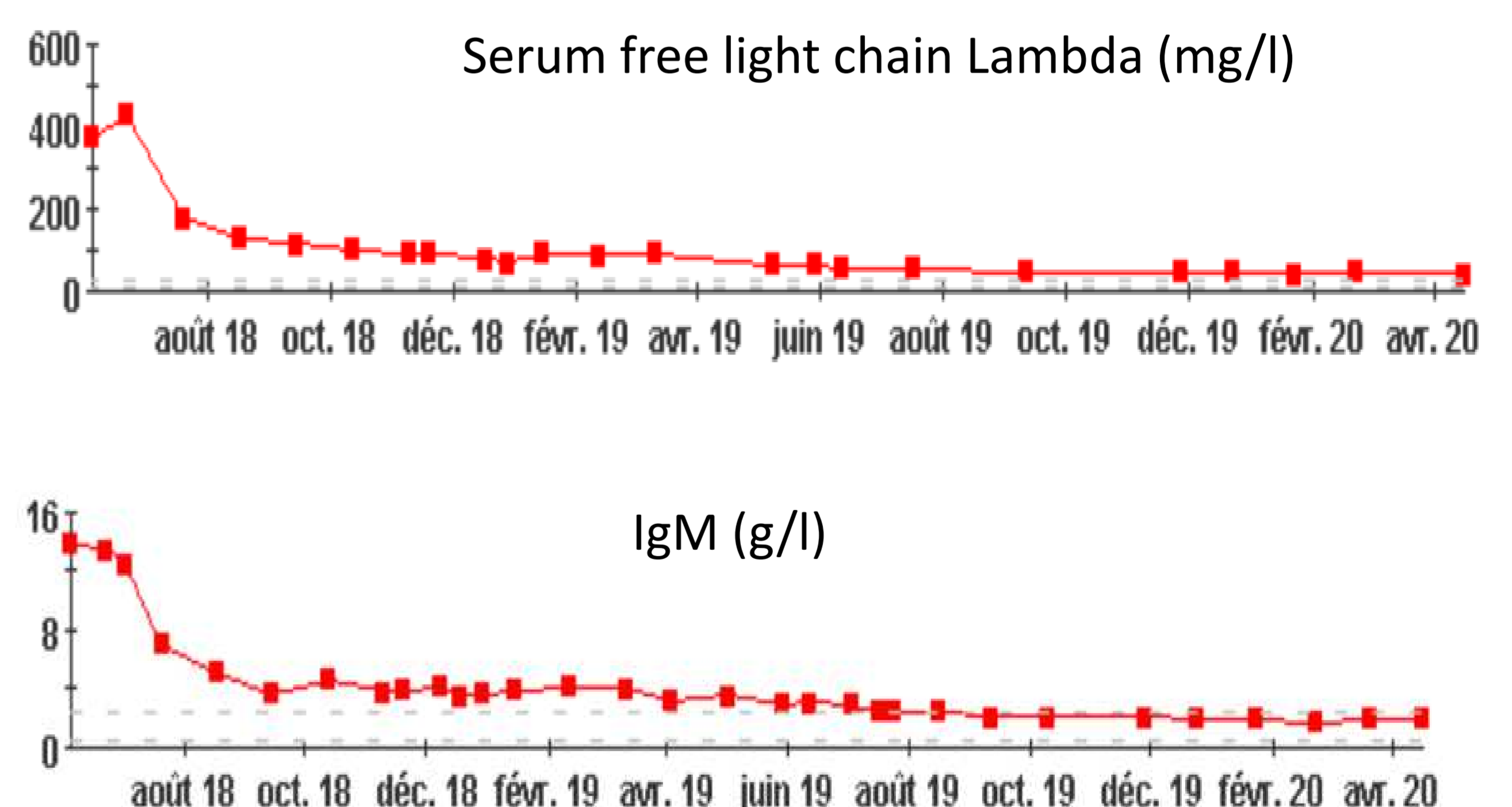
CASE REPORT

A 54 year-old man repeatedly complained of shortness of breath that was first attributed to coronaropathy that failed to improve after stenting. He had a 5-year history of IgM MGUS. Echocardiography identified a thickening of the septum that led to the diagnosis of AL lambda amyloidosis related to WM. Initial work-up pointed out a Mayo stage 3 cardiac involvement. He was successively treated with 5 cycles of Rituximab-bortezomib-dexamethasone suspended for a grade 2 peripheral polyneuropathy, followed by 5 cycles of Rituximab-bendamustine without any relevant hematological response or cardiac improvement. He finally achieved a complete hematological remission after six cycles of Daratumumab monotherapy, with a slightly progressive improvement of cardiac function. Treatment is ongoing with the hope to propose autologous transplantation.

Cardiac MRI



Paraprotein evolution



CONCLUSION

IgM-related AL amyloidosis is a distinct entity with a less favorable outcome compared to non-IgM amyloidosis; therefore, early diagnosis is critical for organ prognosis. However, in this case, the delay between the onset of symptoms and diagnosis was over one year. There is no consensus regarding the treatment of this disease. Tackling the lymphoid clone remains the main goal in order to achieve an adequate response. This case highlights the potential role of immunotherapy with Daratumumab.

1. Milani P. et al. Monoclonal IgM-related AL amyloidosis. Best Pract. Res. Clin. Haematol. 2016;29(2): 241-248; 2. Palladini G. et al. Diagnostic challenges of amyloidosis in Waldenström macroglobulinemia. Clin Lymphoma Myeloma Leuk. 2013;13(2):244-6; 3. Gertz MA. et al. Amyloidosis and Waldenström's macroglobulinemia. Hematology ASH Educ Program. 2004; 257-82; 4. Falk RH et al. AL (Light Chain) cardiac amyloidosis: a review of diagnosis and therapy. J Am Coll Cardiol 2016; 68(12): 1323-41; 5. Bhogal S. et al. Cardiac amyloidosis: an updated review with emphasis Diagnosis and future directions. Curr Probl Cardiol 2018; 43(1):10-34; 6. Martinez A. et al. Cardiac amyloidosis. Clin Med. 2018;18(suppl 2): s30-s35; 7. Gavriatopoulou M. et al. European myeloma network recommendations on diagnosis and management of patients with rare plasma cell dyscrasias. Leukemia 2018;32(9): 1883-1898; 8. Joseph NS. et al. Novel approaches for the management of AL amyloidosis. Curr Hematol Malig Rep 2018;13(3): 212-219; 9. Milani P. et al. Novel therapies in light chain amyloidosis. Kidney Int Rep 2017; 3(3): 530-541; 10. Dimopoulos MA. et al. How I treat Waldenström macroglobulinemia. Blood 2019; 134(23): 2022-2035.