Leukopenia in Multiple Sclerosis Patients on Peginterferon-β-1a

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Introduction

Peginterferon β-1a provides a less frequent injection schedule (every 2 weeks) with a reduction in annualized relapse rate similar to intramuscular interferon-β-1a. Hematologic lab abnormalities were reported in only 1% of patients in a phase III trial.

Leukopenia was noted in 3 peginterferon β-1a patients in one practice. We review cases of peginterferon-β-1a induced leukopenia and discuss treatment implications in a real-world setting.

Methods

Retrospective chart review of all patients starting treatment with peginterferon-β-1a in 2015 or 2016

Results

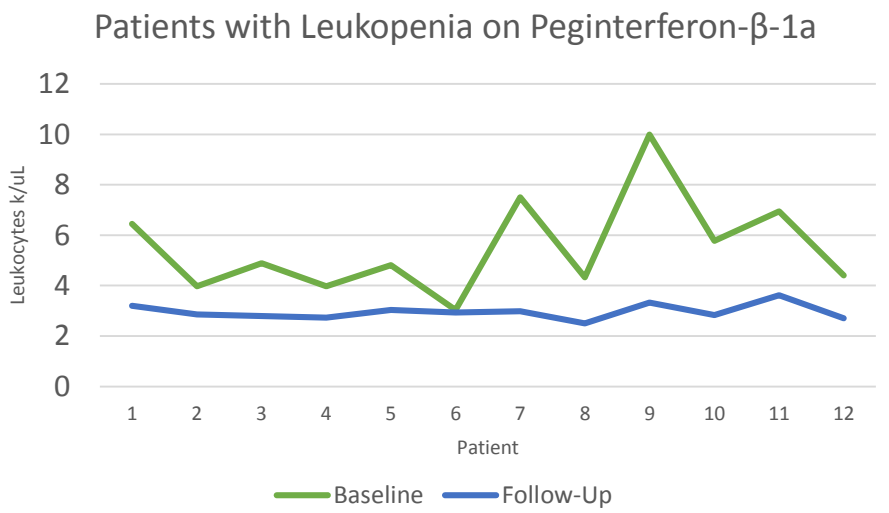
43 pts

(-) 10 pts lack of baseline or f/u labs

(-) 3 pts abnormal baseline labs

30 pts (median follow-up 425 days, range 31-821 days)

Total n = 30	N	%	Range
Leukopenia	12	40	2.5-3.62 k/µL
Low ALC	8	26.7	0.92-1.4 k/µL
Low ANC	2	6.7	



No serious infections were seen among these patients despite hematological abnormalities.

Only 13 patients (36%) continued peginterferon-β-1a at the last follow-up. Discontinuation reasons were: depression (2), site reactions (3), flu like side effects (2), leukopenia (1), proteinuria (1), breakthrough disease (2), SPMS (1), insurance (1), pregnancy (1).

Discussion

The presence of leukopenia following initiation of peginterferon-β-1a in this series of patients highlights the need for additional real-world safety data for this medication, particularly for those patients considering a switch among interferon preparations.

References

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