

A Web Based Survey to assess Peginterferon beta-1a tolerability: preliminary results from an Italian cohort.

A. Manni, D. Paolicelli, V. Di Lecce, A. Iaffaldano, C. Tortorella, S. Zoccolella, P. Iaffaldano, E. Luciannatelli, M. Trojano

Department of Basic Medical Sciences, Neuroscience and Sense Organs - University of Bari "Aldo Moro" - Bari

Background: In Relapsing Remitting Multiple Sclerosis (RRMS) treatment efficacy can be reduced by factors affecting adherence and compliance, including flu-like symptoms (FLS) and injection site reactions (ISR). Peginterferon beta-1a (PEGIFN) a subcutaneous 125 µg interferon beta-1a, administered every 2 weeks, can address this need.

OBJECTIVE: To evaluate early data of PEGIFN tolerability in a real life setting.

Methods: 40 RRMS patients underwent PEGIFN from January to March 2016. Telephone interviews to patients or care-givers has been used to gather information about most common side effects from the first injections. We created a on-line survey where patients were invited to answer anonymously questions related to Patients Reported Outcomes (PROs):

- The EQ-5D, that samples these health dimensions: mobility, self care, usual activities pain/discomfort, and anxiety/depression.
- Treatment Satisfaction Questionnaire for Medication(TSQM-9), that provide scores on effectiveness, convenience and global satisfaction.
- Patient Global Impression of Change (PGIC), rating about drug-related overall improvement.
- 4-item Morisky Medication Adherence Scale (4-MMAS).

Results: The mean follow-up period was 3.2±1.2 months. Baseline characteristics of the cohort are shown in **Table 1**. Eighteen patients experienced ISR and 26 FLS; however, 90% of subjects were adherent, considering the 4-MMAS (**Fig.1**). Seven subjects discontinued the drug: 6 for FLS, 1 for ISR; all of these patients were previously treated with IFN beta-1a im, and they returned to their previous treatment thereafter. At the EQ-5D, 70% of patients did not complained about mobility, self care and usual activities while this percentage dropped to 50% in the pain/discomfort and anxiety/depression domains. (**Fig.2**) At the TSQM-9, 50% of subjects were satisfied of the effectiveness of the drug, and 70% of patients gave positive evaluations in the convenience and global satisfaction items. At the PGIC 55% of the patients did not depicted a good rating of overall improvement. (**Fig. 3**)

Conclusions: During PEGIFN treatment ISR and FLS were commonly detected, especially in the first period. Using online administration and feedback can empower patients to take responsibility about the management of their therapy. Online surveys may represent a good opportunity to underline unmet patient needs.

Table 1: Baseline characteristics of the cohort

Sex (F/M)	24/16
Age at the first dose: Mean(±SD)	41.59 (±11.8)
EDSS score : Median (range)	2.0 (1.0-6.0)
Last treatment pre-PEG	
•IFNβ- 1 a sc	8
•IFNβ- 1 a im	22
•Naive	10
Reasons for shift	
•Side effects	14
•Poor adherence	26

Fig.1: Morisky Medication Adherence Scales: MMAS-4

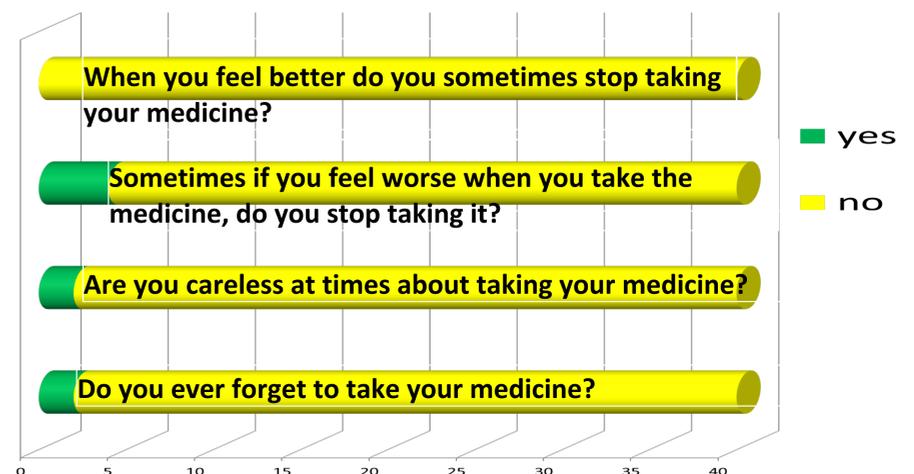


Fig.2: EQ-5D

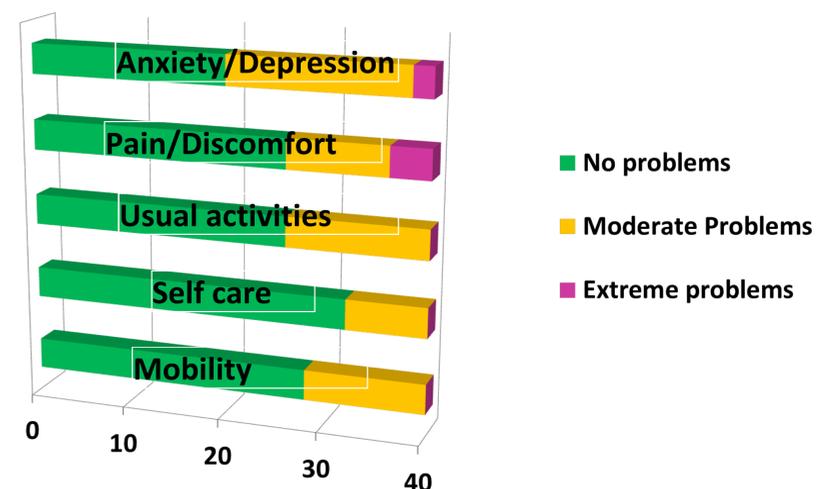
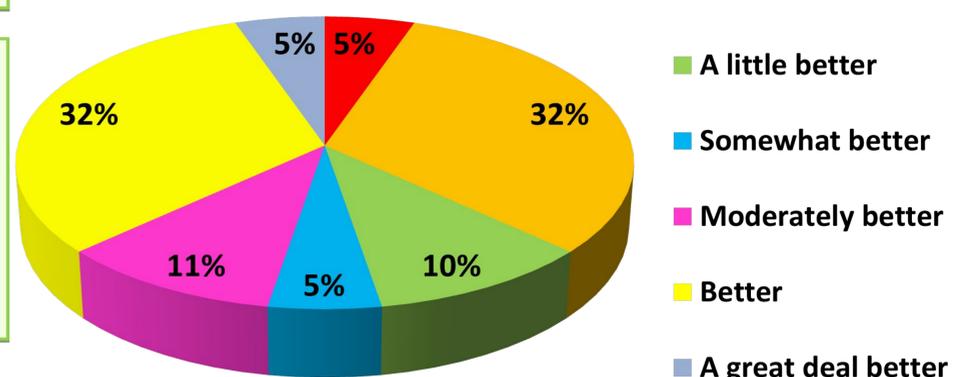


Fig.3: PGIC



References:

- Calabresi PA, et al. Pegylated interferon beta-1a for relapsing-remitting multiple sclerosis (ADVANCE): a randomised, phase 3, double-blind study. *Lancet Neurol* 2014;13(7):657-65
- Kieseier BC, et al. Peginterferon beta-1a in multiple sclerosis: 2-year results from ADVANCE. *Mult Scler*. 2015 Jul;21(8):1025-35.
- Newsome SD, et al. Impact of peginterferon beta-1a and disease factors on quality of life in multiple sclerosis. *Mult Scler Relat Disord*. 2015(4) : 350-357