

# Case Series of Peginterferon Alpha-2a-Associated Depression and Suicide Attempt Reported to Taiwan National Adverse Drug Reaction Reporting System

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Disclosure : Taiwan National Adverse Drug Reaction Reporting Center, operated under Taiwan Drug Relief Foundation, is designated and funded by Taiwan Food and Drug Administration, Department of Health, Taiwan.



## Objective

To review the characteristics of cases with peginterferon alpha-2a-associated depression and suicide.

## Methods

This study collects reports from electronic database of Taiwan National Adverse Drug Reaction Reporting System from Oct 2003 to Dec 2011. Cases with peginterferon alpha-2a-associated depression and suicide were included in this study.

## Results

**20** cases were identified. Most of the cases were collected from call center and some information was missing. Only 8 cases reported with sufficient information were included for further analysis. Among the 8 cases, there were 4 males and 3 females (1 with unknown gender). The mean age was 48.7 years (range, 32-67 years; 1 with unknown age). 3 patients were also on ribavirin. 4 patients had the combination symptoms of depression and suicide attempt or ideation, and 1 patient had depression history while the other 3 patients were reported depression only. The mean interval from first dose of peginterferon alpha-2a to onset of depression or suicide attempt was 17.4 weeks (range, 2-42 weeks). Two cases were with the symptoms onset before 4 weeks. Only one patient who was not properly treated for the reported symptoms completed suicide after 30 weeks of peginterferon alpha-2a consumption. The remaining 7 patients still were controlled the symptoms with medical management.

**Table. Demographics of reported depression and suicide attempt cases**

No	Gender	Age	Ribavirin treated	ADR symptom	Onset interval of ADR symptom	Drug intervention for ADR	Patient outcome
1	M	60	No	depression, suicide	30weeks	No	Completed suicide
2	F	33	Yes	depression	4 weeks	Yes	Unresolved <sup>#</sup>
3	F	38	Yes	depression	42weeks(25weeks completed treatment)	Yes	Unresolved <sup>#</sup>
4	M	49	No	depression	22weeks	Yes	Unresolved <sup>#</sup>
5	M	67	Yes	depression(patient had depression history)	13weeks	Yes	Unresolved <sup>#</sup>
6	F	32	No	depression and suicide attempt	10 weeks (suicide attempt)	Yes	Controlled <sup>#*</sup>
7	M	62	No	suicide attempt	16weeks	Yes	Controlled <sup>&amp;</sup>
8	?	?	No	suicide ideation	2weeks	Yes	Controlled <sup>@</sup>

Abbreviation: F, Female; M, Male; ADR: Adverse Drug Reaction

<sup>#</sup> Depression persisting and be treated continued. <sup>\*</sup> Suicide attempt didn't happen again. <sup>&</sup> ADR doesn't happen again. <sup>@</sup> Patient counseled by the psychiatrist.

## Conclusions

Compared the onset interval with other studies (average between 4-12 weeks), our data revealed a wider range. However, the mechanism(s) of peginterferon alpha-2a-associated depression and suicide is still unknown. Patients before peginterferon alpha-2a treatment should be informed with this possible adverse reaction. During treatment, patients should pay attention to the change of emotion and consult the psychiatrist if any suspect symptoms occur. Physicians should be aware this issue and take proper management to prevent the unfortunate tragedy.

## Reference

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