Tolerability of central nervous system symptoms among HIV-1 infected efavirenz users: analysis of patient electronic medical record data

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BACKGROUND

More than 1.2 million people in the United States are living with human immunodeficiency virus (HIV).

Adherence to antiretroviral therapy (ART) is vital in preventing ART failure.

Efavirenz (EFV, Sustiva) is a non-nucleoside reverse transcriptase inhibitor (NNRTI) indicated for the treatment of HIV type 1 (HIV-1).

Approved in the U.S. in 1998, EFV was first recommended with emtricitabine (FTC) and tenofovir disoproxil fumarate (TDF) as a regimen for initial therapy of HIV infection in the 2003 Department of Health and Human Services (DHHS) Guidelines.1

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Exclusion criteria:

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Previously untreated HIV-1 infected patients

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RESULTS

New onset CNS-related symptoms after EFV initiation

50% of patients on EFV (n=174) reported at least one CNS-related symptom during the one year follow-up period (Figure 1). Of these, 19 discontinued therapy due to CNS-related symptoms.

EFV discontinuation

16.2% (281/1,742) of new users discontinued EFV over one year of follow-up (Table 2).

DISCUSSION

We found that reports of CNS symptoms and discontinuation occurred about 4 months after EFV initiation.

CONSULTATIONS

EFV appears to be well tolerated in this analysis of real-world EMR data. EFV discontinuation due to CNS-related symptoms was uncommon.

CNN-related symptoms are common prior to EFV initiation, as well as between EFV discontinuers and continuers.

IMPROVEMENTS in EMR data entry and collection may help to better define reasons for discontinuation of antiretroviral therapy.

REFERENCES


ACKNOWLEDGMENTS

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Add the following key points:

- A limitation of analyzing EMR data is that reports of symptoms and medication use are not verified and are unlikely to be fully reported.

- Consistency was found in the frequency of CNS symptoms prior to and following EFV initiation, as well as between EFV discontinuers and continuers.

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- Previously untreated HIV-1 infected patients

- Adherence to antiretroviral therapy (ART) is vital in preventing ART failure.

- EFV discontinuation

- 16.2% (281/1,742) of new users discontinued EFV over one year of follow-up (Table 2).

- Frequency of discontinuation by probable cause, all EFV New Users, % (n)

- EFV New Users: 2008-2014

- Overall, 1.1% (19/1,742) of new users discontinued EFV due to CNS-related symptoms

- Discontinue EFV over 12.9 (182) 30.0 (100) 16.2 (282)

- Unknown 7.2 (102) 17.7 (59) 9.2 (161)

- Other possible AEs 3.8 (54) 9.6 (32) 4.9 (86)

- Virologic failure 0.9 (12) 1.2 (4) 0.9 (16)

- Frequency of discontinuation by probable cause, all EFV New Users, % (n)

- A. Overall report of new onset CNS-related symptoms

- New onset CNS-related symptoms: before and after EFV initiation among EFV new users

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