DRUG-DRUG INTERACTIONS AMONG HEPATITIS C PATIENTS TREATED WITH DIRECT ACTING ANTIVIRALS

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Background

Interferon-free combination direct acting antivirals (DAAs) regimens have improved tolerability and efficacy for HCV-infected patients but it is necesary to check drug-drug interactions (DDIs) because they have the potential to cause toxicity or loss of efficacy to treat HCV.

Purpose

To describe the interactions associated with the use of comedications in patients treated with DAA using a computer generated alarm tool.

Material and methods

Prospective observational study. All HCV-infectect patients initiating DAAs regimens were included. DDIs between DAAs and other comedications were cross-checked using Farmaweb tool. Farmaweb is a web based solution that analyzes patients´ drug prescription. Clinically relevant DDIs are classified according to University of Liverpool database as drug combination contraindicated or not recommended (type A) and potential interaction that may require close monitoring or changing dose (type B). The Anatomical Therapeutic Chemical (ATC) groups involved in DDIs were analized. Data collection was performed between January 2016–July 2017.

Results

96 potentially relevant interactions were observed in 68 patients. DAAs involved in DDIs were sofosbuvir/ledipasvir (55.2%), paritaprevir/ritonavir, ombitasvir plus dasabuvir (35.4%), grazoprevir/elbasvir (5.2%) and daclatasvir (4.2%). 9 different DDIs were detected for sofosbuvir/ledipasvir, 14 for paritaprevir/ritonavir, ombitasvir plus dasabuvir, 5 for grazoprevir/elbasvir and 4 for daclatasvir. The top three medications which can cause clinically relevant DDIs with at least one of the antiviral regimens were proton pump inhibitors (59.3%), HMG CoA reductase inhibitors (18.8%) and antihipertensives (8.3%). The top three of the therapeutic subgroup (2nd ATC level) were "drugs for acid related disorders" (A02), "lipid modifying agents" (C10) and "calcium channel blockers" (C08). Only 5 DDIs (5.2%) were classified as type A. All type A DDis detected refers to the combination of paritaprevir/ritonavir, ombitasvir plus dasabuvir and statins (simvastatin and atorvastatin).

Conclusion

Proton pump inhibitors and statins were frequently involved in DDIs between DAAs and comedications. Drug combination contraindicated or not recommended were scarce and only involved paritaprevir/ritonavir, ombitasvir plus dasabuvir combinations.

References and/or Acknowledgements

Prioritization for interferon-free regimens and potential drug interactions of current direct-acting anti-hepatitis C agents in routine clinical practice. Papatheodoridi M, Dalekos GN, Goulis J, Manolakopoulos S, Triantos C, Zachou K, et al. Ann Gastroenterol. 2017;30(5):542-549.

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