SAFETY OF NEW DIRECT-ACTING ANTIVIRALS (DAAS): DOES CARDIAC TOXICITY REPRESENT A REAL WARNING?

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Introduction. Since the approval of new direct-acting antivirals (DAAs), several safety issues, including the risk of cardiac adverse events, have emerged.

Objectives and methods. In order to analyse the cardiotoxicity profile of DAAs, a review of post-marketing studies from literature was performed. In addition, an analysis of adverse drug reactions (ADRs) reports from National Network of Pharmacovigilance in Campania Region was performed to collect data about cardiac adverse events.

Results. The most frequent ADRs related to DAAs, as reported in pivotal studies, were asthenia, headache, nausea, and insomnia. However, other ADRs emerged from post-marketing studies; among these, cardiac ADRs (most of all arrhythmias) need a considerable attention. The analyssis of National Network of Pharmacovigilance showed 18 cases of cardiac ADRs reported in Campania Region. Furthermore, in order to estabilish a clear correlation between DAAs and cardiac disorders, five Post Authorization Safety Studies have been initiated; one of them, concerning the concomitant use of HCV-NS5B pronucleotide inhibitors (such as sofosbuvir) and amiodarone is evaluating the increase of the risk of bradyarrhythmia, and it will be completed by the end of September 2017.

Conclusions. Although patients included in the analysed studies had other risk factors, such as hypertension, progression of liver disease or the use of concomitant drugs, preliminary results from real-life suggest a possible correlation between new DAAs and cardiac toxicity. Further post-marketing surveillance and observational studies are needed in order to improve knowledge in this field.