Concomitant drug use in patients with chronic hepatitis C and change over time: a nationwide population-based register study from 2005 through 2013

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BACKGROUND

Around 80% of patients infected with the hepatitis C virus will develop a chronic liver infection. Patients with chronic hepatitis C (CHC) have a significantly higher number of comorbidities compared with a comparable co-registered cohort (Büscher et al., 2017, 2018). The higher number of comorbidities most likely indicates why patients with CHC use a greater number of concomitant drugs compared with undiagnosed controls (Junno et al., 2013). The approval of interferon-free direct-acting antiviral (DAA) treatments has improved the treatment of patients with CHC; however, but concomitant drug use may cause potential drug-drug interactions (DDIs). Much of the real-world experience from Italy indicated that 20% to 25% of the treated CHC patients taking concomitant drugs classified as having a risk for ‘potential interaction’ which might require dose adjustment, and up to 3% were prescribed a non-licensed drug (Kündler et al., 2017). The aim of this nationwide registry study was to describe the utilization of prescribed drugs in all patients diagnosed with CHC in Sweden.

METHODS

Table 1. Description of National Swedish Patient Registers

Table 2. Top 10 Most Commonly Prescribed Drugs in 2013 with a “Do Not Co-administer” Classification to Any DAA.

Table 3. Cumulative Survival in Patients With CHC Grouped Depending on the Number of Different Drugs Used During Year 1 Following CHC Diagnosis

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CONCLUSIONS

Most concomitant prescribed drugs used by patients with CHC have a low potential for interactions with direct-acting antivirals.

Simvastatin and carbamazepine were the two most frequently prescribed drugs classified as “do not co-administer”.

Prescribed drug use is reduced after CHC diagnosis.

A lower number of prescribed drugs the year after CHC diagnosis is associated with improved survival.

Fig. 1. Percentage of DDI classifications* for all dispensed drugs in 2013 per DAA.

Fig. 2. Changes in the number of different dispensed drugs in patients with CHC (n=15,992).

*Including drugs not classified.

Fig. 3. Proportion of different drugs used each year after CHC diagnosis.

Fig. 4. Percentage of patients according to the number of potential DDI per each DAA up to 8 years after CHC diagnosis.

Fig. 5. Cumulative survival in patients with CHC grouped depending on the number of different drugs used during year 1 after CHC diagnosis.