SUCCESSFUL SOfosbuvir/Velpatasvir Treatment in a Hepatitis C Patient Receiving Chronic Antiepileptic Therapy: A Case Report

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Background and Importance

- Co-administration of direct acting antivirals (DAA) with strong cytochrome P-450 inducing drugs, such as some antiepileptics, is contraindicated because it can result in virological failure.
- There is usually some reluctance to modify chronic antiepileptics therapy in patients with well-controlled seizures.
- This case report contributes to the limited literature regarding co-administration of sofosbuvir/velpatasvir and antiepileptic drugs.

Aim and Objectives

- To assess the efficacy of sofosbuvir/velpatasvir for 12 weeks in a patient taking the strong CYP inducing drugs carbamazepine and phenobarbital.

Materials and Methods

- Descriptive and retrospective clinical case. Data were obtained from electronic medical records.
- An undetectable RNA level 12 weeks after completion of therapy (SVR12) defines treatment success.

Results

- Three drug interactions were detected:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Effect</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omeprazole</td>
<td>Reduction in antiviral concentrations</td>
<td>Omeprazole was administered 4h after antiviral drug</td>
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<tr>
<td>Carbamazepine</td>
<td>Reduction in antiviral concentrations</td>
<td>It was recommended not to change their anticonvulsant drugs, so sofosbuvir/velpatasvir was initiated</td>
</tr>
<tr>
<td>Phenobarbital</td>
<td>Reduction in antiviral concentrations</td>
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- The treatment was well tolerated, adherence was correct and the patient has remained seizure-free.
- Viral load was undetectable at 4 weeks, 12 weeks and 24 weeks post-treatment initiation, therefore SVR12 was achieved.

Conclusion and Relevance

- Sofosbuvir/velpatasvir administered for 12 weeks in a patient on treatment with carbamazepine and phenobarbital achieved SVR12 despite the enzyme-inducing effect of antiepileptic drugs on the hepatitis C antiviral concentrations.

References