DECREASED INR AFTER ACENOCOUMAROL AND OMBITASVIR/ PARITAPREVIR/ RITONAVIR CO-ADMINISTRATION


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OBJECTIVES

Limited data are available regarding co-administration of acenocoumarol with direct-acting antiviral agents.

Objective: We report a case of a patient who required a significantly increase of the acenocoumarol weekly dose when co-administered with ombitasvir/paritaprevir/ritonavir.

METHODS

Data on INR, acenocumarol dosing and concomitant medications were obtained from the General Practitioner (GP) and the patient. Potential drug-drug interactions were checked using Lexi-Comp®, summaries of product characteristics and the “University of Liverpool hepatitis drug interactions” website.

RESULTS

61-year-old male, treatment-naïve genotype 1a chronic hepatitis C. Baseline viral load: 2,893,236 IU/ml and compensated liver cirrhosis.

Medical record: rheumatic valvulopathy that required double valve replacement. He was anticoagulated with acenocoumarol 8mg/week (target INR: 2.5-3.5). INR stable on a dose of 8.5-9.5mg/week over the last few years.

Concomitant medications: omeprazole 20mg QD, lisinopril 5mg QD, digoxin 0.125mg QD, bisoprolol 2.5mg QD and furosemide as needed. Only omeprazole interacts with acenocoumarol but increasing its effect.

Concomitant medications had not been modified for several months.

Antiviral treatment onset (April 2015): ombitasvir/paritaprevir/ritonavir 25mg/150mg/100mg QD, dasabuvir 250mg BID and ribavirin 400mg BID for 24 weeks.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>INR</th>
<th>COMMENT</th>
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<tbody>
<tr>
<td>4</td>
<td>1.4</td>
<td>GP increased acenocoumarol to 11mg/week and enoxaparin 100mg QD was started</td>
</tr>
<tr>
<td>6</td>
<td>1.6</td>
<td>Acenocoumarol was titrated to 13mg/week. Enoxaparin was reduced to 60mg QD</td>
</tr>
<tr>
<td>9</td>
<td>1.9</td>
<td>Dose was increased to 16.5 mg/week</td>
</tr>
<tr>
<td>12</td>
<td>2.1</td>
<td>Dose was increased to 19.5 mg/week. Enoxaparin was withheld</td>
</tr>
<tr>
<td>16</td>
<td>2.3</td>
<td>Dose was titrated to 20.5 mg/week</td>
</tr>
<tr>
<td>20</td>
<td>2.6</td>
<td>Dose was decreased to 20 mg/week</td>
</tr>
<tr>
<td>24</td>
<td>3.8</td>
<td>Dose was decreased to 19 mg/week</td>
</tr>
</tbody>
</table>

Therefore, the acenocoumarol dose had been increased by 137.5%

No compliance problems, treatment modifications or dietary changes.

No thrombotic or bleeding during treatment.

Two weeks after the end of therapy with DAAs, the INR increased to 4.5 and the GP reduced the acenocoumarol dose. One month later, the INR is 3.9 and the acenocoumarol weekly dose has been decreased to 10 mg.

- Naranjo algorithm=6 (probable)

CONCLUSIONS

Because of possible INR abnormalities during the concomitant use of acenocoumarol and ombitasvir/paritaprevir/ritonavir, clinicians should closely monitor INR values.

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