Quercetin exhibits hepatoprotective activity in rats

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Quercetin is a flavonoid present in Artemisia scoparia (AS) and other plants [1]. It possesses anti-inflammatory [2] antioxidant and anti-tumor [4] activities. AS has been used traditionally to correct liver damage. In our previous studies, we observed significant reduction in the paracetamol-induced rise in serum transaminases (GOT and GPT) levels in rats. Each bar represents mean ± SEM of 10 determinations. **P<0.01 Compared with toxic control group.

Table 1. Effect of quercetin on paracetamol-induced lethality in mice

<table>
<thead>
<tr>
<th>Group</th>
<th>Treatment deaths</th>
<th>%Lethality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saline + paracetamol (3 ml/kg + 1 g/kg)</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Quercetin + Paracetamol (10 mg/kg + 1 g/kg)</td>
<td>2</td>
</tr>
</tbody>
</table>

Paracetamol as well as significant reduction in the paracetamol-induced rise in serum GOT and GPT levels.

Drugs with calcium channel blocking [9], antioxidant and free radical scavenging [10] properties are considered useful in liver damage and hepatoprotective activity of quercetin found in this study, may be attributed to such activities of quercetin reported in earlier studies [4, 5].

These results indicate that quercetin possesses hepatoprotective activity and the presence of this compound in Artemisia scoparia may explain the folkloric use of the plant in liver damage.