EFFICIENCY OF A PROTOCOL TO PREVENT DELAYED CHEMOTHERAPY-INDUCED EMESIS


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BACKGROUND

Delayed-chemotherapy-induced nausea and vomiting (dCINV) are common adverse events and appear within 24h after receiving highly emetogenic drugs: cisplatin-cyclophosphamide-doxorubicin

Antiemetic guidelines recommend APR to prevent dCINV.

However, authors had not considered:

• Two-drug combination (DEX+MET) as standard treatment in previous versions
• No study had compared APR with the previous two-drug combination deemed valid by authors themselves.

PURPOSE

To assess the efficiency of a dCINV-prophylaxis protocol on patients of high risk of emesis.

MATERIALS AND METHODS

A protocol/algorithm based on available published trials was designed. This algorithm was applied according to each patient needs and was part of pharmatherapeutical monitoring.

RESULTS

<table>
<thead>
<tr>
<th>Anti-nausea regimen</th>
<th>Cost / patient</th>
<th>Patients with CR</th>
<th>Cost of treatment for all patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>+2 APR+DEX+ LOR</td>
<td>58.53 €</td>
<td>11 (4.3%)</td>
<td>643.83 €</td>
</tr>
<tr>
<td>+1 DEX+MET +LOR</td>
<td>4.18 €</td>
<td>10 (3.9%)</td>
<td>41.80 €</td>
</tr>
<tr>
<td>Standard DEX+MET</td>
<td>4.13 €</td>
<td>89 (34.8%)</td>
<td>367.57 €</td>
</tr>
<tr>
<td>-1 DEX+MET if required</td>
<td>4.13 €</td>
<td>65 (25.4%)</td>
<td>268.45 €</td>
</tr>
<tr>
<td>-2 DEX alone</td>
<td>3.20 €</td>
<td>39 (15.2%)</td>
<td>124.80 €</td>
</tr>
<tr>
<td>-3 Low-dose DEX</td>
<td>2.46 €</td>
<td>42 (16.4%)</td>
<td>103.32 €</td>
</tr>
</tbody>
</table>

If all the patients had received APR 14983.68 €

Estimated saving 89.66% 1549.77 €

CONCLUSIONS

Only a small percentage of patients needed aprepitant to prevent dCINV.

Total costs of dCINV prophylaxis based on the proposed algorithm will be one tenth of the cost of APR-based regimen.

APR: aprepitant, DEX: dexamethasone, LOR: lorazepam, MET: metoclopramide