EFFECTS OF DESMOPRESSIN PLUS PROPIVERINE FOR THE TREATMENT OF MONOSYMPTOMATIC PRIMARY NOCTURNAL ENURESIS IN CHILDREN

Hypothesis / aims of study
We evaluated the efficacy of a combination treatment of desmopressin and propiverine for treating children with monosymptomatic primary nocturnal enuresis.

Study design, materials and methods
A total of 53 children aged 6 to 15 years old with monosymptomatic nocturnal enuresis were enrolled in this prospective study. Children with a minimum of 3 wet nights weekly were included. Children were randomly assigned groups and treated with desmopressin 0.2mg, or a combination of desmopressin plus propiverine 10mg. Of these patients 43 (31 boys and 12 girls, mean age 8.4 ± 2.5 years, range 4 to 13) were followed for more than 6 months. Efficacy was measured at 1, 3 and 6 months in terms of average enuretic frequency after treatment.

Results
Of the 43 children finally analyzed 23 received combination therapy of desmopressin and propiverine and 20 received desmopressin alone. The frequency of nocturnal enuresis at baseline in monotherapy group and combination therapy was similar (5.45 ± 1.57 vs 5.82 ± 1.44). However, decrease of the nocturnal enuresis was significantly pronounced in combination group after 6 months treatment than in monotherapy group (2.2 ± 1.01 vs 1.29 ± 0.67). Combination therapy produced better outcomes than monotherapy in terms of number of nocturnal enuresis episode (p=0.017). The adverse event was minimal.

Interpretation of results
Combination therapy with desmopressin plus propiverine for the treatment of monosymptomatic nocturnal enuresis was well tolerated, and gave effective results in reducing enuresis episode than single therapy of desmopressin in children.

Concluding message
Propiverine can be safely used in children with monosymptomatic nocturnal enuresis.

Table 1. Comparison of patients basal characteristics between groups

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Desmopressin monotherapy</th>
<th>Propiverine add on</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of patients (n)</td>
<td>20</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Mean age (years)</td>
<td>8.5 ± 2.37</td>
<td>8.3 ± 2.65</td>
<td>0.801*</td>
</tr>
<tr>
<td>No. males (%)</td>
<td>14 (70)</td>
<td>17 (74)</td>
<td>0.775†</td>
</tr>
<tr>
<td>No. females (%)</td>
<td>6 (30)</td>
<td>6 (26)</td>
<td></td>
</tr>
<tr>
<td>No. of weekly enuresis</td>
<td>5.45 ± 1.57</td>
<td>5.82 ± 1.44</td>
<td>0.417*</td>
</tr>
</tbody>
</table>

Data are presented as mean ± SD, unless otherwise noted; data in parentheses are percentages

* student T-test
† chi-squared test

Disclosures
Funding: Nothing to disclose Clinical Trial: No Subjects: HUMAN Ethics Committee: Ethics Committee of Chonnam National University Medical School Helsinki: Yes Informed Consent: Yes