We present two cases of neonatal HH diagnosed and treated with propranolol in our hospital.

The first one corresponded to a full-term female newborn, large for gestational age and born to a diabetic mother (BDM). The abdominal ultrasound performed during the routine screening of newborns BDM revealed a liver lesion, with features compatible with HH. In abdominal computed axial tomography (CAT) [Fig. 1A–C]. Treatment with propranolol was initiated at 13 days post birth at a dose of 1 mg/kg/day, which was increased gradually to 3 mg/kg/day with no associated adverse effects. At 4 months of life, there were no signs of the liver lesion on ultrasound examination, and the beta blocker was tapered off. However, at 15 months a recurrence of HH with a 17 mm lesion was observed adjacent to the vena cava, which resolved spontaneously. Currently, at 24 months of age, the tumour is in full remission.

The second case corresponded to a full-term newborn girl with normal weight transferred to our hospital at 2 days of life for a mass in the right abdomen that extended to the right iliac fossa associated with significant abdominal distension and collateral circulation. Abdominal ultrasonography showed a mass in the right hepatic lobe, and the findings of abdominal CAT were compatible with diffuse HH [Fig. 1D–F]. At 4 days of life, treatment with VCR, methylprednisolone and propranolol at 0.5 mg/kg/day was initiated along with a pre-transplant evaluation. The ultrasound followup at 10 weeks of treatment showed a 70 × 50 mm lesion, with barely discernible lesions in the left hepatic lobe, so VCR was discontinued and corticosteroid therapy was tapered off, continuing treatment with beta blockers alone from the second month of life at the maximum dose of 3 mg/kg for a total duration of 15 months, which the patient tolerated well, with gradual reduction of the HH. Currently, at age 5 years, the patient is in full remission.

In conclusion, propranolol could be used as the first-line treatment of multifocal and diffuse HH given its efficacy and safety, minimising the risks associated with other treatment options. We assume that, as occurs in cases of cutaneous IHs, it acts by stopping the proliferation of the mass and inducing its remission.

References

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Clinical and epidemiological characteristics of neonatal influenza

Características clínicas y epidemiológicas de la gripe neonatal

Dear Editor:

Influenza is a viral infection affecting the general population, but especially the very old and the very young. Paediatric influenza is found primarily in children under 5 years old. The symptoms are fairly non-specific below 2 years of age and it is only from the age of 4–5 years that its clinical manifestations can guide us towards this disease.1

There are few existing studies on neonatal influenza (at less than 28 days of age) that focus on the influenza A (H1N1) pandemic.2–4 For this reason we present a prospective study on the cases detected in the last 3 influenza seasons (2012/13, 2013/14 and 2014/15).

A nasopharyngeal aspirate was taken from patients who attended the emergency department during the flu months. Influenza viruses were detected using a real-time RT-PCR (reverse transcription polymerase chain reaction) technique (Anyplex® RV16; Seegene, South Korea). The medical records of neonates diagnosed with influenza were reviewed.

Over the course of the 3 seasons 1215 cases of flu were diagnosed, 631 (51.9%) of which were in children under 15 years of age. Of these, 21 cases presented in neonates (3.3% of the total number of influenza cases studied). The mean
age was 24.1 days (range, 5–28 days). The youngest patients (5 and 9 days old) had an influenza A strain (H3N2). Table 1 presents the general characteristics of the neonates studied. Three patients had a history of prematurity and one had previously had bronchiolitis due to RSV (respiratory syncytial virus). None of the patients died as a consequence or by reason of influenza. None of the mothers had been vaccinated against influenza during pregnancy.

Table 1 General characteristics of the patients diagnosed with neonatal influenza.

<table>
<thead>
<tr>
<th>Type of influenza</th>
<th>A(H1N1) (N=10)</th>
<th>A(H3N2) (N=8)</th>
<th>B (N=3)</th>
<th>Total (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6 (60)(^a)</td>
<td>5 (62.5)</td>
<td>0</td>
<td>11 (52.3)</td>
</tr>
<tr>
<td>Female</td>
<td>4 (40)</td>
<td>3 (37.5)</td>
<td>3 (100)</td>
<td>10 (47.7)</td>
</tr>
<tr>
<td>Mean age</td>
<td>24.5 days</td>
<td>23.5 days</td>
<td>24.3 days</td>
<td>24.1 days</td>
</tr>
<tr>
<td>Temperature &gt;38°C</td>
<td>8 (80)</td>
<td>5 (62.5)</td>
<td>3 (100)</td>
<td>16 (76.1)</td>
</tr>
<tr>
<td>Nasopharyngeal secretion</td>
<td>6 (60)</td>
<td>5 (62.5)</td>
<td>3 (100)</td>
<td>14 (66.6)</td>
</tr>
<tr>
<td>Cough</td>
<td>8 (80)</td>
<td>3 (37.5)</td>
<td>1 (33.3)</td>
<td>12 (57.1)</td>
</tr>
<tr>
<td>Lethargy</td>
<td>7 (70)</td>
<td>3 (37.5)</td>
<td>1 (33.3)</td>
<td>11 (52.3)</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>5 (50)</td>
<td>8 (100)</td>
<td>0</td>
<td>13 (61.9)</td>
</tr>
<tr>
<td>Formula feeding</td>
<td>4 (40)</td>
<td>0</td>
<td>2 (66.6)</td>
<td>6 (28.5)</td>
</tr>
<tr>
<td>Mixed feeding</td>
<td>1 (10)</td>
<td>0</td>
<td>1 (33.3)</td>
<td>2 (9.6)</td>
</tr>
<tr>
<td>Influenza in the household</td>
<td>5 (50)</td>
<td>5 (62.5)</td>
<td>2 (66.6)</td>
<td>12 (57.1)</td>
</tr>
<tr>
<td>Antibiotic treatment</td>
<td>1 (10)</td>
<td>2 (25.0)</td>
<td>1 (33.3)</td>
<td>4 (19.1)</td>
</tr>
<tr>
<td>Hospitalisation</td>
<td>1 (10)</td>
<td>0</td>
<td>0</td>
<td>1 (4.7)</td>
</tr>
</tbody>
</table>

\(^a\) A(H1N1)pdm09.

\(^b\) Number of cases (percentage).

emphasised that vaccination of the mother during pregnancy is a protective factor against neonatal influenza.

We agree with other studies\(^3,4\) that the main risk factor for neonatal influenza is the presence of influenza in the household (57.1%), and that this is especially important for cases of influenza A (H3N2) and influenza B. This family factor was detected in 90% of the neonates with influenza A (H1N1)p in our study.\(^4\)

Neonatal influenza seems to be a mild or moderate condition that does not require hospitalisation due to its limited general impact. Most cases are contracted within the household and do not involve respiratory complications.

References


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