P02.10 Congenital lung malformations: suboptimal agreement between prenatal and postnatal diagnosis

Annelieke Hijkoop1* (a.hijkoop@erasmusmc.nl), Nina CJ Peters2, Marloes M van Schoonhoven1, Johannes M Schnater1, Dick Tibboel1, René MH Wijnen1, Hanneke IJsselstijn1, Titia E Cohen-Overbeek2.
Department of 1Pediatric Surgery and Intensive Care, 2Obstetrics and Gynecology; Rotterdam, The Netherlands. *These authors contributed equally.

Objective

○ To evaluate agreement between prenatal and postnatal diagnosis of congenital lung malformations (CLM).

Conclusion and recommendation

○ There is moderate agreement between prenatal and postnatal CLM diagnosis.
○ Every child with prenatal ultrasound diagnosis of 'CLM' should get CT imaging after birth → early in case of symptoms, and otherwise after 6 months (considering radiation exposure)

Methods

○ Liveborn CLM patients (2000-2015)
○ Our policy
  • Symptomatic: surgical resection
  • Asymptomatic: wait-and-see approach
○ Prenatal diagnosis: ultrasound
○ Postnatal diagnosis: CT and/or histology

Results

Figure 1. Inclusion flow chart

Eligible patients: n = 112
- Prenatal diagnosis at 21.6±3.4 weeks
- Born at 39.2±1.6 weeks

Excluded: n = 17
- No CT / histology: n = 10
- CLM no longer visible: n = 7

Included: n = 95
- CT only: n = 66
- Histology only: n = 3
- CT + histology: n = 26

Table 1. Diagnostic agreement between prenatal ultrasound diagnosis and postnatal CT and/or histology diagnosis of CLM

<table>
<thead>
<tr>
<th>Prenatal diagnosis</th>
<th>CPAM</th>
<th>BPS</th>
<th>BC</th>
<th>CPAM/BPS</th>
<th>Other1</th>
<th>Total</th>
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<td>CPAM</td>
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<td>1</td>
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<td>1</td>
<td>2a</td>
<td>49</td>
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<tr>
<td>BPS</td>
<td>10</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>BC</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1b</td>
<td>3</td>
</tr>
<tr>
<td>CLE</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1c</td>
<td>7</td>
</tr>
<tr>
<td>CPAM/BPS</td>
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<td>1</td>
<td>-</td>
<td>2</td>
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<tr>
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<td>-</td>
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<tr>
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<td>-</td>
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<td>Total</td>
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<td>4</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>95</td>
</tr>
</tbody>
</table>


1 Prenatal: a CPAM or bronchial obstruction (n=1), CPAM or lymphangioma (n=1); b BPS or BC (n=1); c CPAM or bronchial atresia (n=1). 2 Postnatal: d Bronchial atresia (n=2), bronchial atresia or CLE (n=1), CLE + solid components (n=1).

Figure 2. Pie chart showing postnatal confirmation of prenatal CLM diagnosis

- Complete confirmation
- Partial confirmation (hybrid or inconclusive)
- No confirmation

Figure 1. Inclusion flow chart

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