Diagnosis

We describe a case referred at 21.4 w for left pleural effusion. Isolated hydrothorax without mediastinal shift was confirmed at diagnosis. Thoraco and amniocentesis were negative for infections or genetic abnormalities and pleural fluid was compatible with chylothorax (Figure 1).

Thoraco-amniotic shunt

Follow-up showed progressive hydrothorax with mediastinal shift and unilateral double pigtail catheter thoraco-amniotic shunting was inserted at 26.3 w. At 29.4 w, left lung enlargement with higher echogenicity, flattening of the diaphragm and dextrocardia were detected. A bronchial obstruction complication was suspected. Magnetic resonance imaging corroborated the hypothesis (Figure 2, Figure 3).

Fetoscopy

Fetoscopic removal of the shunt was proceeded at 33.5 w (Figure 4). Trachea and main bronchial structures were confirmed to be normal by fetoscopy. Echogenicity, size and mediastinal shift normalized during the first week without re-accumulation of pleural fluid (Figure 5).

Rupture of membranes and vaginal delivery occurred at 38.6 weeks. Neonate weighted 2660 g with normal Apgar and no need of ventilatory support. Neonate thoracic chest radiography was normal, and she was discharged after 7 days with normal follow-up.