

Respiratory distress after ductus arteriosus ligation – Question

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The answers can be found in the following article:

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Case summary

A 31⁺² weeks gestational age, birthweight 1,490 g female was born after an emergency C-section due to abruptio placenta. The Apgar score was 4/8/8, needing positive pressure followed by nasal continuous airway

positive pressure (NCPAP). One dose of poractant alfa was administered in the first hour of life. On day 4 (D4) of life, the 2D-echocardiogram performed due to a systolic murmur showed the presence of a hemodynamically significant patent ductus arteriosus. After two cycles of intravenous ibuprofen in standard doses (three doses per cycle: first dose 10 mg/kg/day once a day, followed by two doses of 5 mg/kg/day once a day), the ductus arteriosus (DA) remained significant. The DA was surgically ligated on D12, successfully. On D3 postoperative, she was extubated to NCPAP, maintaining mild respiratory distress. During a progressive increase of enteral feeding, she presented with increased work of breathing and maintenance of oxygen supply, despite a normal chest X-ray. On D25 of life, the chest X-ray revealed an elevation of the left diaphragm (**Fig. 1**).

Questions

1. What is your diagnosis?
2. Would you perform any complementary test to confirm the suspected diagnosis?
3. What do you expect to observe on physical examination?
4. What approach and outcome are suggested for this patient?

Declaration of interest

The Authors declare that there are no conflicts of interest neither any financial support.

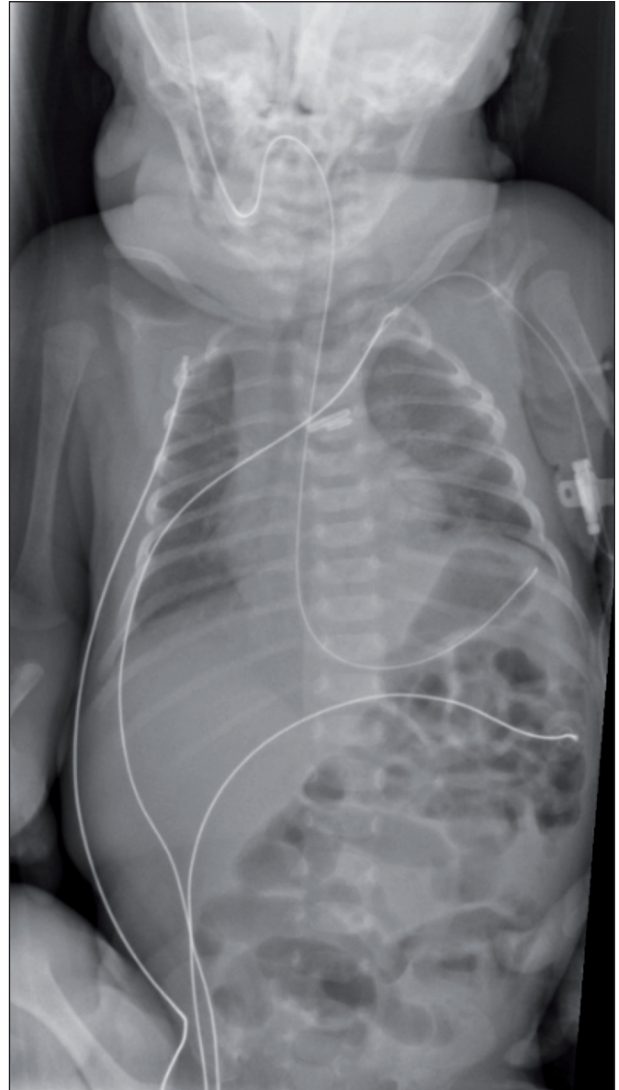


Figure 1. On D25 of life, the chest and abdomen X-ray shows elevation of the left diaphragm.