# Severe perinatal bronchomalacia in newborn with patent ductus arteriosus

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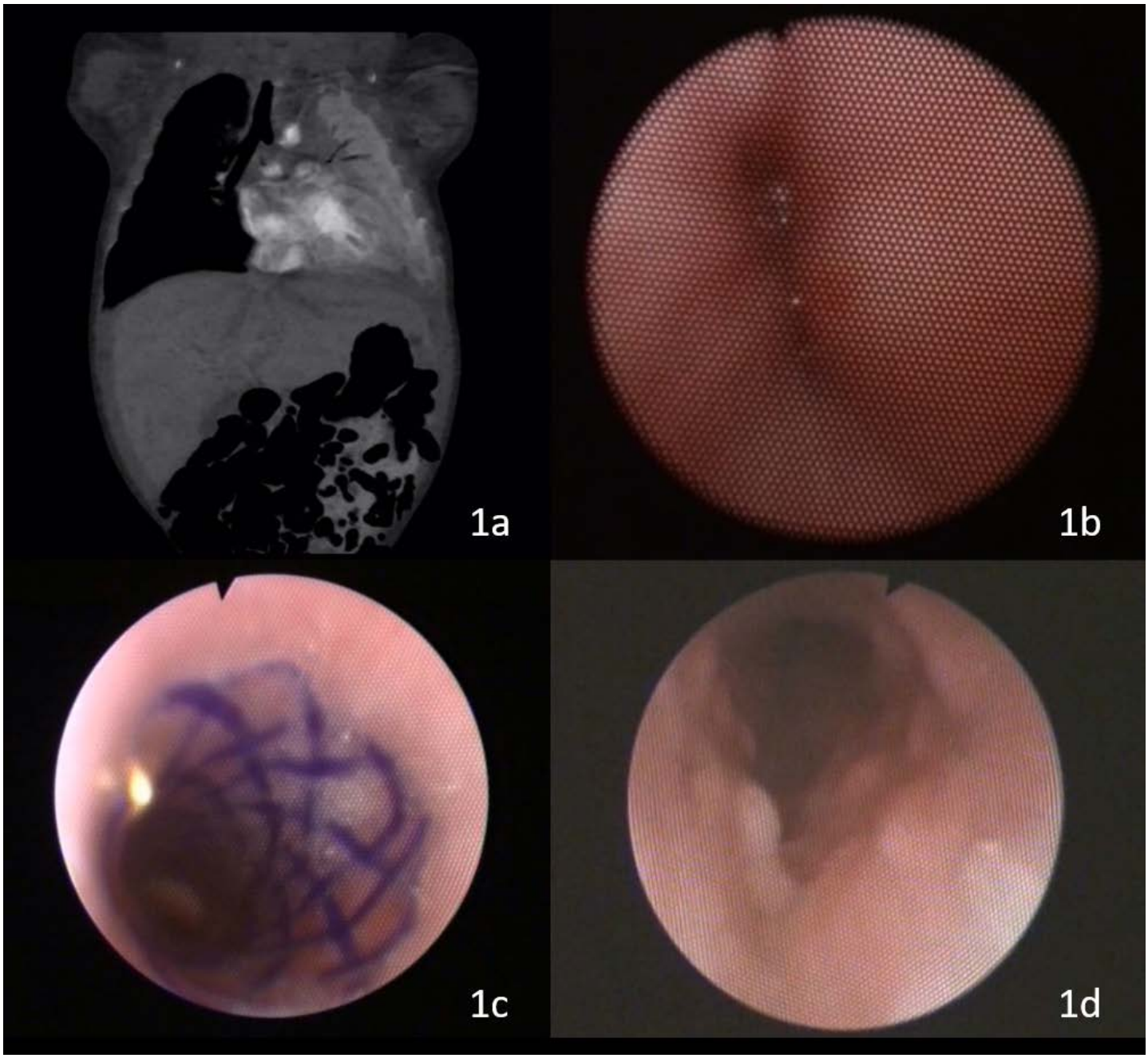
A female newborn was admitted to the PICU for severe respiratory failure. She received a post-natal diagnosis of transposition of great arteries (TGA) with pulmonary atresia (PA), ventricular septal defect (VSD) and patent ductus arteriosus (PDA). Chest x-ray revealed a complete opacity of the left lung. CT scan showed complete left lung atelectasis with ipsilateral mid-distal bronchus collapse. Flexible endoscopy (FAE) showed left bronchomalacia, partially reversible with positive pressure ventilation. After complete recruitment of left lung collapse by mechanical controlled ventilation, child was undergone to Blalock Taussig shunt, PDA closure and atrial septostomy on day 15 after birth. Post-operative FAE showed a residual bronchomalacia completely reversible by CPAP of 5 cm.H2O. After three failed extubation attempts, a left biodegradable bronchial stent 6 mm x 15 mm was positioned on day 80 after birth. This intervention quickly restored spontaneous breathing. Six months after this procedure, FAE showed complete reabsorption of the stent with minimal collapse and granulation.

**Conclusion:** PDA may cause severe congenital bronchomalacia (2,3); biodegradable (4,5) bronchial stent may be an option in neonatal age to avoid more invasive treatments.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