tracheobronchitis. She was commenced on Rituximab and a six-month course of Cyclophosphamide.

CT Neck and thorax showed focal obliteration of the airway at the level of hypopharynx and narrowing of left main bronchus. CT bronchogram showed the narrowing improved on a PEEP of 12 cm H₂O. She was trialled on BiPAP overnight which helped her symptoms. She was referred to Great Ormond Street Hospital for a review; no further changes in management were suggested.

The patient had recurrent relapses needing intensive care, therefore she was started on methotrexate and adalimumab, and had a balloon dilatation for her subglottic oedema and stenosis, which she tolerated well. She has been discharged home on overnight BiPAP with a plan for monthly balloon dilatations with ENT and to continue on methotrexate and adalimumab with gradual wean of steroids.

Conclusion RP is rare with estimated incidence of 3.5 per million, only 10% cases are seen in paediatrics. Without aggressive and prompt treatment, life-threatening complications can develop rapidly, and outcomes are poor. Managing children with RP with significant airway involvement with NIV and repeated monthly balloon dilatations can help prevent life threatening exacerbations and the need for a tracheostomy. This case demonstrates the importance of multidisciplinary management of this complex condition.

G305(P) ABSTRACT WITHDRAWN

G306(P) A RARE CASE OF CONGENITAL LEFT LUNG APLASIA DIAGNOSED ANTENATALLY

¹M Jagga, ²P Thompson, ¹SV Rasiah. ¹Neonatal Unit, Birmingham Women's and Children's NHS FT, Birmingham, UK; ²Maternity Unit, Birmingham Women's and Children's NHS FT, Birmingham, UK

10.1136/archdischild-2020-rcpch.266

Introduction Pulmonary agenesis was first described in 1673 by De Pozze in a female cadaver biopsy. The condition is characterised by undeveloped pulmonary vessels, bronchi, and parenchyma. It can present bilaterally or unilaterally and, in the latter, the remaining lung contains twice as much alveoli as normal, but has normal bronchi. Although the aplastic side does not have the same structures, it has a rudimentary bronchus. It is extremely rare, occurring in 1:100,000 births. Nearly a third of patients have associated congenital heart diseases. We report a case of unilateral left lung aplasia which was diagnosed antenatally.

Case Report A female baby was born by vaginal delivery at term, weighing 3700 grams. Antenatally the baby was noted to have mediastinal shift on 20 week scan, raising suspicion and leading to a diagnosis of complete left lung aplasia, left pulmonary artery hypoplasia, with normal right lung on subsequent MRI scan at 28 weeks gestation. Foetal ECHO showed normal cardiovascular anatomy.

Baby cried immediately at birth and did not require any resuscitation but started to show signs of respiratory distress at about 15 minutes of age. Baby was transferred to the neonatal intensive care unit and managed on 6 litres of high flow until 12 hours of age. Chest x-ray shows mediastinal shift to the left, with possible right lung

hyperplasia and a small undeveloped left lung. She was subsequently breathing by herself with no signs of respiratory distress and discharged home with paediatric respiratory follow-up.

Conclusion Unilateral lung aplasia is a rare congenital anomaly, usually diagnosed later in life as an incidental finding. It is very rare for antenatal diagnosis, especially if not associated with congenital heart defects. This case was identified because of the mediastinal shift. Children with unilateral lung aplasia are at an increased risk of respiratory tract infections and need regular follow up with respiratory team. Right sided lung aplasia might be associated with Scimitar syndrome. Finally, cases from the literature show poorer outcomes associated with right sided lesions (30% survival into adulthood) compared to left sided lesions (50% survival into adulthood).

G307(P) DOES RAISED FRACTIONAL EXHALED NITRIC OXIDE ALWAYS MEAN POOR COMPLIANCE? A CASE BASED OBSERVATION

¹FG Belais, ²W Kozłowska. ¹Clinical school of Medicine, University of Cambridge, Cambridge, UK; ²Paediatrics, Addenbrookes Hospital, Cambridge University Hospitals Trust, Cambridge, UK

10.1136/archdischild-2020-rcpch.267

Background Fractional exhaled nitric oxide (FeNO) is a well-established inflammation marker in asthma monitoring. It has a diagnostic and prognostic value, helpful in predicting exacerbation rates.¹ The expectation with initiation of treatment is for lung function to improve and FeNO to decrease as inflammation resolves. In some patients, FeNO rises further despite treatment, which some suggest is due to poor compliance. However, this is inconsistent for patients where lung function improves.

Objective Demonstrate that raised FeNO after treatment initiation does not necessarily equate poor compliance.

Method Retrospective retrieval of full spirometry results of pediatric patients started on asthma treatment in the last 2 years.

Results 5 children/young people have incongruent improvement in FEV1 in parallel to an increase in FeNO after initial treatment (table 1).

Conclusion The results question whether increased FeNO is always due to poor compliance. Perhaps the initial low FeNO is due trapped gas, which then escapes as airways open with

Abstract G307(P) Table 1

Patient	FEV1% predicted (%)	FeNO (ppb)	Time interval (days)
1	86	51	0
	94	92	216
2	67	31	0
	69	139	175
3	78	14	0
	93	50	350
4	83	17	0
	97	38	259
5	92	12	0
	93	29	77