Congenital Lobar Emphysema

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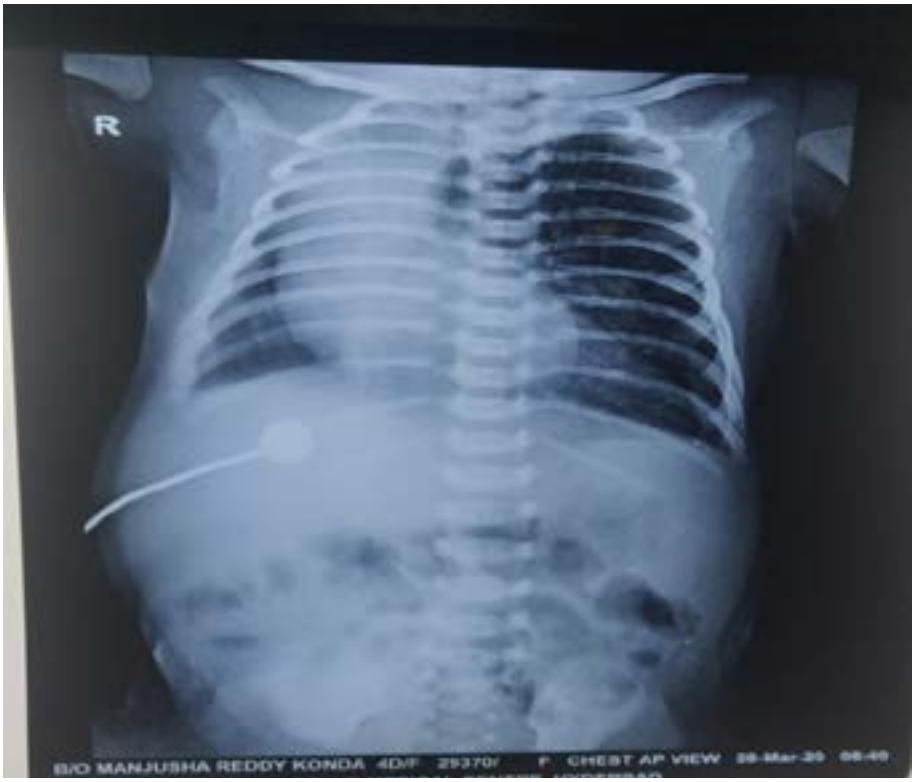
Case Report

B/O MR, A 3.198kgs female baby was delivered at Term (37weeks) by a 25yrs old (Gravida 4, Abortions 2 and 1 ectopic pregnancy) woman by Caesarean section. LSCS was indicated by maternal request. Pregnancy was uneventful and no significant family history for any abnormality. NT scans and level 2 scans and growth scans were normal.

After uncomplicated delivery with Apgar score of 8/10 and 9/10 at 1 and 5 min respectively, baby developed mild respiratory distress which required nasal prongs oxygen and was admitted in NICU for further care. Respiratory distress was assumed to be due to Transient tachypnea of newborn which is common in term babies. Chest X ray was done and showed superior mediastinal shift to the right side which was unusual. 2D- Echo was done to rule out any cardiac defects and showed Mild PPHN, otherwise structurally normal heart. Mild PPHN was managed conservatively. Respiratory distress persisted and CBG done showed severe respiratory acidosis, hence was connected to HFNC.

Baby continued to require respiratory support and hence a repeated Chest X Ray was done to rule out other causes and showed hyperlucency of left upper lobe with herniation to the right side and shift of superior mediastinal structures with compression of right lung.TWIN 1 - Male baby born at 9.20 am 20 sec with birth weight of 1.1 kg with APGAR: 6/ 10 at 1, 8/ 10 at 5'. Had primary apnoea (HR< 100) for which he was given 1cycle of PPV, following which respiratory efforts and HR improved (>100/min). Baby had mild respiratory distress syndrome requiring CPAP for 1 day. During hospital stay twin 1 had RDS, NNJ, thrombocytopenia without any bleeding manifestations, Anaemia of prematurity. Initial NSG was suggestive of bilateral lateral ventricle dilatation with grade 3 GMH on left side and grade 1 on right side. He had no seizures or neurological deficits. Repeat NSG after 4 days showed decrease in size of GMH. Initially ROP screening showed ROP Zone 2, stage 1 with immature retina.



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Hence, a diagnosis of congenital lobar emphysema (CLE) was made, and findings were confirmed by CT chest [1]. CLE is a rare malformation presenting as respiratory distress in the newborn period. Management depends upon the severity of symptoms, as baby has breathing difficulty requiring HFNC support surgery was planned. Parents were explained and counselled about the diagnosis, the need for surgery and the prognosis thereafter.

After the involvement of our Pediatric Surgeon and anesthetic team, Left Upper lobe lobectomy was planned and done immediately. Surgery was uneventful. Post-surgery, respiratory distress settled, baby was extubated within 24hrs and started on feeds. By post-operative day 3, baby was in room air, taking feeds well and shifted to mother's side. Baby was active, accepting mother's milk well and was discharged as a healthy baby with happy parents.

Baby is now healthy, playful and thriving well and is on regular follow up with us [2-5].

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