A case of VACTERL in primigravida: A case study

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ABSTRACT
Introduction: VACTERL which stands for vertebral defects, anal atresia, cardiac defects, tracheo-esophageal fistula, renal anomalies, and limb abnormalities is a disorder that affects many body systems. A diagnosis is made when at least three of these congenital anomalies are present. Diagnosis is difficult as many disorders have multiple features in common with VACTERL. Among the causes are abnormal or asymmetric timing of molecular oscillator, disturbance of mesoderm production and environmental agents. Risk factors include assisted reproductive techniques (ART), pre-gestational diabetes mellitus, and chronic lower obstructive pulmonary diseases. The occurrence rate is approximately 1/10,000-1/40,000 live births.

Case Description: We describe a case which was diagnosed at 35 weeks, following ultrasound scan findings of polycystic kidneys, cystic lesions from bowel suspecting ileal atresia, short long bones, single umbilical artery, and severe oligohydromnios. Caesarean section was done for fetal distress at 35 weeks. Baby was delivered limp and required intubation and assisted ventilation. The was distended abdomen, imperforated anus and single umbilical artery. Echocardiogram showed mild PPHN with moderate PDA, moderate ASD, mild MR and AR. Ultrasound noted multicystic structures with fluid filled dilated bowels with bilateral hydronephrosis. Baby expired at 14 hours of life with the diagnosis of VACTERL.

Discussion: The limitation of our resources may pose a hurdle to an early diagnosis of VACTERL. Approximately 90% of VACTERL occur sporadically, with an empiric recurrence risk of 1% or less. VACTREL association are heterogenous, as likely more causes will arise in future.