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SERIAL AMNIOREDUCTION ON THE FETAL CASE ATRESIA ESOPHAGUS

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ABSTRACT

This case report is due to recognize how important pre natal diagnostic and conservative management, amniocentesis and serial amnion reduction and post natal management when facing congenital abnormalities case. Congenital abnormality intrauterine can be identified with amniocentesis. Amniocentesis is an invasive procedure that required amnion fluid sample for analysis fetal chromosome. Was not done before 15 weeks of gestational age, this procedure is done by ultrasound guidelines. Ateresia esophagus is congenital abnormality marked by no connection between distal and proximal part of esophagus. Ateresia esophagus can happened with fistula, where there was an abnormal junction of esophagus with trachea. The fetus with ateresia esophagus is unable to swallow, characterized by increasing amount of amnion fluid, called polyhydramnion. Amnion reduction is a new technique, based on the utilization of the system aspiration bottles a vacuum to all patients who develop polihydramnion.

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INTRODUCTION

Intervention of pregnancy in the early trimester is very important to know the existence of congenital abnormalities in infants. The most common congenital abnormality of amniocentesis is an esophageal atresia disorder. Esophageal atresia is a congenital aberration characterized by non-connecting the proximal esophagus with the distal esophagus. Esophageal atresia may occur with the tracheoesophageal fistula, a congenital aberration in which an abnormal connection exists between the esophagus and the trachea. Esophageal atresia involves a congenital aberration group composed of a disorder of esophageal with or without association with the trachea. In 86% of cases there was a distal tracheoesophageal fistula, in 7% of cases without fistulas. While in 4% of cases there were tracheoesophageal fistulas without atresia, occurring 1 in 2500 live births. Infants with esophageal atresia are unable to swallow saliva and are characterized by a high salivary amount and require repeated suction. If a case of congenital anomaly with esophageal atresia with polyhydramnios will be performed repair of esophageal atresia after delivery and amnioreduction in polyhydramnios.

Case

In this case report discussing a 30-year-old pregnant woman from anamnesis, physical examination and support was initially diagnosed as pregnant (G2P0010) with polyhydramnios with congenital abnormalities in the fetus. It is important to be able to accurately diagnose antenatal by

sharpening clinical examination and investigation with ultrasound. In this patient treated with amniocentesis and amnioreduction performed serial 4 times. The first intervention procedure aims to reduce amniotic fluid and karyotype examination. The next procedure is to reduce the amount of amniotic fluid. Amnioreduction serial aims for conservative management. Atresia esophagus are established using ultrasound examination based on nonvisualized stomach. The results of karyotyping examination found no chromosomal abnormalities.

Babies born perabdominal with poor outcome, early neonatal mortality due to severe asphyxia. Allegedly caused by tracheal atresia. Atresia trachea is lethal, whereas esophageal atresia is non lethal (which can still be corrected abnormalities after birth). To confirm the diagnosis of this disorder, clinical autopsies should be carried out in order to know the cause of death but the family rejects this autopsy procedure. Esophageal atresia with fistulas in the trachea may still be causal. Failure of cannula installation on the upper airway (trachea) may occur due to narrowing and / or alteration of the tracheal shaft angle to the fistula.



Figure 1 stomach unvisualized



Figure 2 Polihydramnion

DISCUSSION

Pregnant women with polyhydramnios tend to the fetus to have congenital abnormalities. The most likely congenital anomaly is esophageal atresia because in this case the fetus cannot swallow anything which the normal fetus may swallow if there is amniotic fluid.

Amniocentesis is a commonly used test for chromosomal abnormalities test, genetic randomized trial, the rate of spontaneous abortion after early amniocentesis was 2.5 percent compared with 0.7 percent in the second trimester amniocentesis.^{1,3}

The diagnosis of polyhydramnios is obtained from the results of physical and auxiliary examinations. In these patients, physical examination found higher uterine fundus greater than gestational age and obtained from more abnormal water ultrasound than normal ($SDP > 8$). While the diagnosis of fetal esophageal atresia is obtained from the results of examination of amniotic fluid that many in the mother which should have amniotic fluid swallowed in the fetus but in the fetus this patient cannot swallow the possibility of esophageal atresia and from the ultrasound there is no gastric (*unvisualized stomach*).^{2,4} In this case with pregnant polyhydramnios with possible congenital anomaly atresia esophagus, amniocentesis has been performed for chromosome analysis which results in no abnormality and amnioreduction for 4 times to reduce the amount of amniotic fluid. The baby dies with the alleged cause of death is tracheal atresia. According to the literature, the atresia trachea prognosis is worse and lethal. To confirm the diagnosis of this disorder, clinical autopsies should be carried out in order to know the cause of death but the family rejects the autopsy procedure. Esophageal atresia with fistulas in the trachea may still be causal. Failure of disease and infection of the fetus. The timing of this amniocentesis is 15-18 weeks' gestation. In the USA usually do early amniocentesis, is at 10-14 weeks of gestation. However, because of the high potential to become PROM (Premature Rupture Of Membrane), infection and bleeding, so amniocentesis is rarely done at this age. In these patients, amniocentesis is performed at 30 weeks' gestation. According to the literature, a recent multicenter cannula installation on the upper airway (trachea) may occur due to narrowing and/or alteration of the tracheal shaft angle to the fistula.

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