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A Unusual Clinical Case of Gastroschisis: A Congenital Anterior Abdominal Wall Defect

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Clinical Case Description

A female patient aged 32 years with 36 weeks of pregnancy came to our hospital. She was referred from nearby primary health center because USG suggested of malformation of anterior abdominal wall. After per vaginal examination she was explained about the risk along with alternatives of the surgery. Informed and written consent was taken, and she was taken for normal vaginal delivery. It was confirmed that gastroschisis was present after delivery. A male baby was delivered, which was 54 cm in length and 3.2 kg at birth with appearance, pulse, grimace, activity, and respiration which is the APGAR of the newborn score 7/9. Intestinal loop was seen in gastroschisis at birth. Soon patient and neonate were referred to Neonatal intensive care to provide further care and treatment for the newborn.

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Table 1: Loops of baby's intestines including stomach, large and small intestines that extended outside its anterior abdomen wall.

Differential diagnosis

Omphalocele, Physiological bowel herniation, Body stalk herniation.

Discussion

Gastroschisis is one of the rarest presentations of abdominal wall defect at birth, Gastroschisis is relatively an uncommon birth defect in which baby's intestines, including the stomach and large intestine and small intestines, protrude through the abdominal wall that leave the body through 2 to 4 cm hole, it is most frequently on the right side next to the belly button, during foetal development. About 1 out of every two thousand neonates may have it [1]. Gastroschisis stems from unclear origins, involving inadequate ventral body wall formation in embryonic stages, leading to bowel herniation. Factors like tobacco, environmental exposures (like nitrosamines such as atrazine), cyclooxygenase inhibitor usage (such as aspirin, ibuprofen), and decongestants (like pseudoephedrine, phenylpropanolamine) are implicated in its development [2-4]. Gastroschisis infants require fetal growth surveillance as up to 60% may experience growth restriction. Antenatal testing is advisable if intrauterine demise risk arises. Isolated gastroschisis infants have chromosomal anomaly rates akin to the general population, but with extraintestinal structural issues, risks escalate. Amniocentesis may be necessary for parental decision-making and management of the newborn [5]. Following gastroschisis diagnosis, ultrasound monitors fetal growth and amniotic fluid volume every three to four weeks, commencing at 24 weeks gestation [6]. Oligohydramnios, might be associated with restriction of the fetal growth and poses a risk of the cord compression, whereas polyhydramnios could indicate potential bowel atresia [7]. Fetal growth restriction accompanying abdominal wall defects could indicate higher likelihood of adverse neonatal outcomes [8,9].

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