Clinical Image: A Severe Form of Gastroschisis

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BRIEF HISTORY: A 25-year-old pregnant Kenyan woman of African descent presented to our hospital at 26 weeks of gestation with complaints of lower abdominal pain and reduced fetal movements for one day. This was her second pregnancy, with first being unremarkable. She had attended antenatal clinic once during which her antenatal profile was unremarkable. Apart from salbutamol inhaler for her asthma, she did not use any medications during the pregnancy. Abdominal examination revealed a fundal height of 34 weeks with no fetal heart rate on the cardiotocogram. A clinical diagnosis of intrauterine fetal death (IUFD) with



Figure 1: Herniation of the gut



Figure 2: Wall defect from the xiphisternum with liver herniation

polyhydramnios was made and the patient was sent for urgent obstetric ultrasound. The ultrasound confirmed the IUFD and polyhydramnios and showed an anterior abdominal wall defect with abdominal viscera floating in the amniotic fluid.

Based on the congenital anomaly and given that the woman had a previous cesarean scar, an emergency hysterotomy was performed. A macerated fetus with a severe form of gastroschisis involving the whole anterior abdominal wall with gut and solid viscera herniation was delivered (Figures 1, 2). Gastroschisis is a form of anterior abdominal wall defect, mostly occurring at the right paraumbilical region. The neonates born with gastroschisis have their viscera protruding through such a defect [1].

The cause of gastroschisis is not known. The postulated mechanisms of development of this anterior abdominal wall defect include *in utero* omphalomesenteric vascular accidents and defective development of the somites responsible for the integrity of the anterior abdominal wall [1].

Risk factors associated with gastroschisis are young maternal age (<20 years), low socioeconomic status, low parity, and multivitamin deficiency. Substances implicated include cigarette smoking, alcohol, cocaine, marijuana, amphetamines and oral contraceptives [1, 2].

The fetal mortality rate of gastroschisis is around 12% [1]. The management of this anomaly is usually surgical correction which, depending on the severity, can be primary or staged closure [3].

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