Gastroschisis and Omphalocele: A Case report

Mosammat Nargis Shamima¹, Mohd. Alamgir Hossain², Shahela Jesmin³, Nargis Jahan⁴, Noshin Tasnim⁵

Abstract

Fetal gastroschisis and omphalocele are congenital defects of abdominal wall that are often diagnosed by prenatal ultrasound done for routine screening or for obstetric indications such as evaluating an elevated maternal serum alpha fetoprotein (AFP). Regular antenatal checkup and Prenatal ultrasound could potentially identify the overwhelming majority of abdominal wall defects and accurately distinguish omphalocele from gastroschisis. But in a developing country like Bangladesh neglected patients fail to seek antenatal visit and prenatal diagnosis. Here we report a case of gastroschisis and omphalocele diagnosed incidentally during last trimester.

Key Words: Omphalocele, Gastroschisis, Alpha fetoprotein, Preconceptionalcounselling.

Introduction

Omphalocele and Gastroschisis are the two most common major congenital abdominal wall defects (1). Although textbooks group the two entities together, they are separate and distinct and have many important differences in pathology and associated conditions that explain the differences in treatment plans and outcomes. Understanding the similarities and differences between gastroschisis and omphalocele is essential for patient management.

Gastroschisis is a full-thickness defect in the abdominal wall usually just to the right of a normal insertion of the umbilical cord into the body wall. A variable amount of intestine and occasionally parts of other abdominal organs are herniated outside the abdominal wall with no covering membrane or sac.

An omphalocele (also known as exomphalos) is a midline abdominal wall defect of variable size, with the herniated viscera covered by a membrane consisting of peritoneum on the inner surface, amnion on the outer surface, and Wharton’s jelly between the layers. The umbilical vessels insert into the membrane and not the body wall.

Case Report

A 27 years old primigravida was incidentally diagnosed as a case of gastroschisis at her 39 weeks of pregnancy. USG report showed gastroschisis, omphalocele and limb deformity. She had no antenatal checkup during her pregnancy and never did an ultrasonogram before. She gave a history of taking homeopathic drugs for common cold at 8 wks of pregnancy. Her vital parameters were normal at admission. She was undergone LSCS at 40 wks of pregnancy and a dead congenitally malformed baby was born. Sex was...
not identified. She was managed empathetically during her puerperium. Proper assurance and counseling was done regarding next pregnancy.

Discussion
Omphalocele and gastroschisis are the two most common major congenital abdominal wall defects (1). Omphalocele is a midline anterior abdominal wall defect with extrusion of abdominal viscera, covered by a membranous sac, into the base of the umbilical cord. Gastroschisis is usually a small defect in the anterior abdominal wall typically located to the right of the umbilical ring and resulting in the herniation of the abdominal contents, without a surrounding membrane, into the amniotic cavity. Both malformations are now frequently diagnosed prenatally using ultrasound scanning. There are regional differences in the incidence of abdominal wall defects however, a rough estimate is that worldwide, the incidence of gastroschisis ranges between 0.4 and 3 per 10,000 births and seems to be increasing, whereas the incidence of omphalocele ranges between 1.5 and 3 per 10,000 births and is stable (2-4). These can be prevented by taking preconceptional counseling. Regular intake of Folic acid could reduce the incidence. An early diagnosis can also give the opportunity to terminate earlier.

Conclusion
Preconceptional counseling and prenatal diagnosis is important to identify these cases. Proper education to society may increase the number of patients seeking antenatal visit which will improve the outcome.

References