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Fetal Gastroschisis: A Differential Diagnosis of Uterine Perforation

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Abstract

Gastroschisis is type of an abdominal wall defects, can be diagnosed in antenatal period with the help of an ultrasonic scan. However, routine ultrasonic scanning of all gravida is not possible due to lack of adequate facilities in some health centers in developing countries. Hence, a number of patients with fetal, abdominal wall defects are diagnosed only after the delivery In developing countries, especially in India it is not uncommon to see the patients presenting with gut loops lying in vagina or outside vagina in cases of abortions being managed by unskilled persons. If one sees intestines coming out in the vagina, the first possibility which is thought is of either the uterine perforation or rupture uterus. We report a rare case in which gastrochisis was confused with uterine rupture, due to presence of intestines in the vagina of the mother.

Keywords: Gastroschisis; Bowel Loops; Uterine Perforation.

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Introduction

Gastroschisis is type of an abdominal wall defects, in which is on right side of normally inserted cord and free-floating bowel loops are present [1]. Abdominal wall defects can be diagnosed in antenatal period with the help of an ultrasonic scan. However, routine ultrasonic scanning of all gravida is not possible due to lack of adequate facilities in some health centers in developing countries. Hence, a number of patients with fetal, abdominal wall defects are diagnosed only after the delivery. Uterine perforation is an uncommon but potentially serious complication of evacuation of retained products of conception or termination of pregnancy. The usual presentation of uterine rupture is hemorrhage, shock, distension and pain abdomen [2]. In developing countries, especially in India it is not uncommon to see the patients presenting with gut loops lying in vagina or outside vagina in cases of abortions being managed by unskilled persons [3]. If one sees intestines coming out in the vagina, the first possibility which is thought is of either the uterine perforation or rupture uterus. We report a rare case in which gastrochisis was confused with uterine rupture, due to presence of intestines in the vagina of the mother.

Case Report

A 30 years old unbooked woman gravida four para two with two live children with 24 weeks of pregnancy presented with pains abdomen and leaking per vaginum for two hours was referred to tertiary care center with the diagnosis of uterine perforation. The patient and her attendants were very anxious due to diagnosis of perforation uterus. She belonged to poor socioeconomic status and worked at brick kiln and had no antenatal check up or ultrasound prior this visit. The patient had stable vitals. Abdominal examination revealed 20-22 weeks size, non tense, non tender uterus, with well maintained contour, the fetal parts were palpable. There was pack in the vagina, same removed and on removing the pack; congested and edematous intestinal loops were seen hanging out of vagina. On Vaginal examination, the cervix was four cm dilated, fully effaced, gut loops were coming out

through cervix and fetal parts were felt. Urine was clear with adequate output. As the size of the intestines was not of adult size, and clinically perforation of uterus was ruled out, provisional diagnosis of ruptured Gastroschisis/Omphalocele was made. Augmentation was done with oxytocin and a dead male baby weighing 700 gms was delivered and had no complications, the uterus was found to be intact. Baby was grossly malformed, bowel loops coming out through a paraumblical defect on right side of umblical cord which was not covered by a membrane. Intestine was thickened, edematous and dark red. Anal opening was absent, right lower limb was hypoplastic, left lower limb was deformed (Figure-1). The patient did not give consent for autopsy.

Fig. 1: Fetus with gastroschisis and other anomalies

Discussion

The incidence of gastroschisis is 1/4000-6000 births, prenatal ultrasonography is very important for the detection of abdominal wall defects [4]. Antenatal diagnosis can be made by prenatal sonography and elevated maternal serum AFP levels. Prenatal ultrasonography is very important for the detection, identification, and follow-up of abdominal wall defects. Gastroschisis is usually detected in the second trimester by anomaly scan and by trans vaginal sonography, it can be diagnosed as early as 12 weeks and has 70-72% detection rates [5]. If one sees intestines coming out in the vagina, the first possibility which is thought is of the uterine perforation. In the present case the fetal intestines were confused with the maternal intestines and the diagnosis of uterine perforation was made. Treating obstetrician never thought of the presence of congenital anomaly (Gastroscisis) in fetus, as this is a rare anomaly, and moreover this type of atypical presentation is not reported in literature. In this patient, if a scan was done before 20 weeks of gestation, gastroschisis might have been diagnosed, she would have undergone MTP and undue referral and anxiety to the patient and attendants might have been avoided.

Conclusion

In developing and underdeveloped countries, where still the antenatal anomaly scan is not available to all the mothers, obstetricians should be aware of anterior abdominal wall defects and their presentation as intestines lying in vagina or at introitus, so that unnecessary referral and undue anxiety on the part of patient and treating doctors can be avoided.

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