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Case Report

Incidental finding of unilateral partial agenesis of fallopian tube with complete agenesis of ipsilateral ovary during caesarean section with neonatal outcome

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ABSTRACT

Congenital unilateral absence of fallopian tube with ipsilateral ovarian agenesis is a rare occurrence with a suggested incidence of 1:11240. Unilateral ovarian agenesis (UOA) and fallopian descent problems are other very rare congenital entity. We presented a case report, detailing one such patient where unilateral partial fallopian tube and ipsilateral ovarian agenesis was seen with neonatal outcome. Our case describes 28 years old G5P2L2A2 un booked case with an obstetric history of 2 spontaneous abortion and two previous full term institutional normal vaginal deliveries (both female child) presented at 37 weeks of gestation with borderline oligo hydramnios (USG suggestive of AFI- 9.1 cm), Posterior placenta, EFW- 2003 g, single loop of cord around fetal neck. On repeat scan USG suggestive of AFI-7.7cm, with discrepancy of >2 weeks between POG and LMP IUGR. Elective caesarean section done after patient and relatives counselling and informed consent done. During C- section unilateral partial agenesis of right fallopian tube and complete agenesis of right ovary found incidentally. The left fallopian tube and ovary was normal. A male baby with birth weight 2.2 kg, well cried was born. USG abdomen of baby was performed to rule out any congenital genitourinary abnormalities. USG revealed, a small aplastic left kidney, for which baby was referred to higher center for further renal function workup. This case was unique since the incidental diagnosis of right ovary and right fallopian tube agenesis occurred during C section instead of imaging.

Keywords: Fallopian tube agenesis, Ovary agenesis, Unilateral adnexal agenesis

INTRODUCTION

The fallopian tubes develop from paramesonephric duct with their cranial ends remaining open, connecting the duct with coelomic (peritoneal cavity) and caudal ends communicating with uterine cornuas.[1]

Ovarian development begins with differentiation by gonadal ridge epithelial like cells from mesonephric epithelial cells and proliferation of theca cells. Breakdown of basal lamina underlying the mesonephric surface epithelium allows the migration of stromal cells, vasculature and oogonia into ovary.[2] Congenital unilateral absence of fallopian tube with ipsilateral ovarian agenesis is a rare occurrence with a suggested incidence of 1:11240.[3] Unilateral ovarian agenesis (UOA) and fallopian descent problems are other very rare congenital entity.[4]

We presented a case report, detailing one such patient where unilateral partial fallopian tube and ipsilateral ovarian agenesis was seen with neonatal outcome.

CASE REPORT

Our case describes 28 years old G5P2L2A2 unbooked case with an obstetric history of 2 spontaneous abortion and two

previous full term institutional normal vaginal deliveries (both female child) presented at 37 weeks of gestation with borderline oligohydroamnios (USG suggestive of AFI- 9.1 cm), posterior placenta, EFW- 2003 g, single loop of cord around fetal neck. On repeat scan USG suggestive of AFI- 7.7 cm, with discrepancy of >2 weeks between POG and LMP IUGR.

Elective caesarean section done after patient and relatives counselling and informed consent done.

During C- section unilateral partial agenesis of right fallopian tube and complete agenesis of right ovary found incidentally. The left fallopian tube and ovary was normal. Her post op course was uneventful and patient being discharged in stable condition.

Neonatal outcome

A male baby with birth weight 2.2 kg, well cried was born. Family was counselled about incidental findings related with patient and assurance done. Baby was handed over to neonatology department.

USG abdomen of baby was performed to rule out any congenital genitourinary abnormalities. USG revealed, a small aplastic left kidney, for which baby was referred to higher center for further renal function workup. Baby is on follow up, he is healthy, doing well.

Short coming

Level 2 scan was not done at 18-20 weeks. No previous baseline USG was available.

This case was unique since the incidental diagnosis of right ovary and right fallopian tube agenesis occurred during C section instead of imaging. Patient was asymptomatic and her all previous born girls were healthy and doing well.

It is important for patient counselling to understand the typical antenatal workup and level 2 scan at 18-20 weeks, so to rule out any structural congenital anomalies in baby.

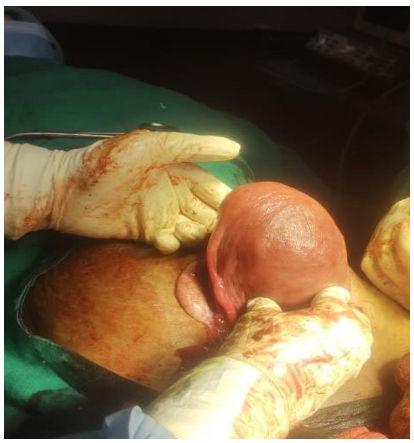

Figure 1: Normal fallopian tube and ovary.

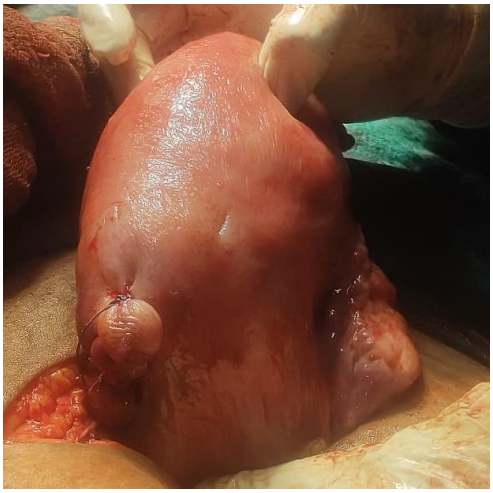

Figure 2: Partial agenesis fallpian tube with complete ovarian agenesis.

DISCUSSION

The unilateral agenesis of the ovary and fallopian tube is an extremely uncommon event with only few cases described in literature.

The unilateral adnexal agenesis without uterine anomaly is a rare condition. Most of the cases of unilateral ovarian agenesis have been reported in association with uterine or urinary tract abnormality.[5-8]

Chen has reported 25 cases of unilateral adnexal agenesis from literature, but all the cases have been reported in a cohort of females of reproductive age.[9]

The agenesis of adnexa in the presence of Mullerian anomalies supports the theory of embryological defects in the development of genital ridge. Other plausible theory for adnexal agenesis postulated by few authors is inadequate blood supply to the caudal portion of Mullerian duct leading to malfunctioning of the autocrine and paracrine signalling.[10] There are two possible explanations of a unilateral ovarian absence, involving an asymptomatic adnexal torsion or congenital absence. Unknown environmental factors or genetic predisposition could contribute to this kind of anomaly.[10]

Together with the predisposing genetic and/or environmental factor not yet discovered, two are the hypotheses explaining the absence of one or both the adnexes, the mechanical hypothesis, i.e.; the asymptomatic torsion of both Fallopian tube and ovary with consequent organs' ischemia and atresia and the embryological hypothesis, i. e; the congenital absence of the adnexes.[11]

CONCLUSION

Unilateral adenexa agenesis is a rarely diagnosed not because of its rare occurrence but because most of time,

condition discovered incidentally during surgery for other pathology due to lack of symptoms in patient.

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