75839_Auto_Edited.docx

WORD COUNT 1128
TIME SUBMITTED 20-JUN-2022 09:09PM
PAPER ID 87477166

Name of Journal: *World Journal of Clinical Cases*

Manuscript NO: 75839

Manuscript Type: CASE REPORT

Congenital ovarian anomaly manifesting as extra tissue connection between the two ovaries: A case report

Choi MG *et al*. Congenital ovarian anomaly

Myeong Gyun Choi, Jong Woon Kim, Yoon Ha Kim, A Mi Kim, Tae Young Kim, Hyun Kyung Ryu

Abstract

BACKGROUND

Ovarian anomalies except for uni- or bilateral streak gonads are rare. We present a rare case of an ovarian anomaly in which both ovaries are connected with extra tissue.

CASE SUMMARY

A 32-year-old, primipara with a twin pregnancy at 36 weeks of gestation was admitted to the hospital with severe preeclampsia. She underwent emergent cesarean section owing to persistent headache, blurred vision, and general edema. After the peritoneal incision, a thin rectangular-shaped tissue was seen in front of the uterus. After the delivery, the extra tissue was removed; no other anomalies were reported with either the ovaries or uterus. Pathology results of the removed tissue disclosed a well-vascularized loose stromal tissue with few follicles and scattered luteinized cells. In this case, to prevent pelvic adhesion or intestinal obstruction resulting from volvulus, strangulation, and torsion, the extra tissue should be removed.

CONCLUSION

We report a case of a rare ovarian anomaly where both ovaries are connected with extra tissue. If the extra tissue extends to the abdominal cavity, it should be removed to prevent pelvic adhesion or abdominal complications including intestinal volvulus, strangulation, and torsion.

Keywords: Connected ovaries; Extra tissue; Ovarian anomaly; Case report

Choi MG, Kim JW, Kim YH, Kim AM, Kim TY, Ryu HK. Congenital ovarian anomaly manifesting as extra tissue connection between the two ovaries: A case report. *World J Clin Cases* 2022; In press

Core Tip: Herein we present a case of a rare ovarian anomaly where both ovaries are connected with extra tissue. If the extra tissue extends to the abdominal cavity, it should be removed to prevent pelvic adhesion or abdominal complications including intestinal volvulus, strangulation, and torsion.

INTRODUCTION

Several ovarian anomalies have been reported. Among them is ovarian absence; in phenotypic females, the absence of both ovaries is generally linked with chromosome abnormalities and gonadal dysgenesis syndrome. In this case, individuals are likely to have streak gonads or underdeveloped gonads, which are a risk factor for malignancy[1]. Congenital unilateral ovarian agenesis in a normal female is extremely rare and asymptomatic in most cases. Ipsilateral renal or ureteric agenesis and/or ipsilateral malformation of the fallopian tube may accompany with congenital unilateral ovarian agenesis. The etiology of unilateral ovarian agenesis has yet to be explained. The two most likely causes of unilateral ovarian agenesis are an asymptomatic torsion of the ovary with consequent organ ischemia and reabsorption or a defect in the development of the Mullerian and gonadal structures underlying vascular anomalies[2]. Another example of ovarian anomalies is ectopic ovaries; whether accessory or supernumerary, ectopic

ovaries are also extremely rare, 1 in 29000 to 1 in 70000 gynecologic admissions[3], and may be associated with other congenital genitourinary abnormalities[1]. An accessory ovary contains ovarian tissue and is usually connected to a normal ovary. In contrast, Supernumerary ovaries are not attached to the ovary but may be found at various sites in or outside of the pelvis. In this report, we present a rare case of an unreported anomaly in which both ovaries are connected with extra tissue.

CASE PRESENTATION

Chief complaints

A 32-year-old presented with high blood pressure.

History of present illness

A primipara woman with a twin pregnancy at 36 weeks of gestation was admitted to the hospital with high blood pressure and proteinuria. The blood pressure was 160/100 while the laboratory test results showed 3+ proteinuria. The pregnancy was after a successful *in vitro* fertilization-embryo transfer.

History of past illness

The patient had no history of past illness.

Personal and family history

The patient had no specific history of genetic diseases.

Physical examination

She underwent emergent caesarean section owing to persistent headache, blurred vision, and general edema. After the peritoneal incision, a thin rectangular-shaped tissue was seen in front of the uterus (Figure 1); it formed a connection between the two ovaries (Figure 2). We displaced it, incised the uterus, and delivered the fetus.

Laboratory examinations

There was no specific finding in laboratory examinations.

Imaging examinations

There was no specific finding in imaging examinations.

FINAL DIAGNOSIS

Congenital ovarian anomaly manifesting as extra tissue connection between the two ovaries.

TREATMENT

After the delivery, we set the margins of both ovaries to avoid injuring the normal ovaries. First, both ends of the extra tissue were ligated and excised. Then the extra tissue was removed; no other abnormal findings were seen in both the ovaries and uterus. We explored the lower abdomen as detailed as possible to check for extra ovary tissues and any other malformations such as renal anomalies, but there were no specific findings. Pathology results of the removed tissue disclosed a well-vascularized loose stromal tissue with few follicles and scattered luteinized cells (Figure 3).

OUTCOME AND FOLLOW-UP

After surgery, the patient recovered and was discharged on the third postoperative day. During an outpatient follow-up after one month, the patient had no abdominal symptoms and ultrasonography revealed no abnormal findings on both adnexa.

DISCUSSION

Several studies have reported numerous cases of ovarian anomalies including bilateral and unilateral ovary absence, accessory, and supernumerary ovary. But there are no reports on cases of connected ovaries, and to the best of our knowledge, this would be the first case report. In our case, a patient was admitted to the hospital with severe

preeclampsia. The patient did not present other symptoms like abdominal pain or pelvic pain and the pregnancy was after a successful *in vitro* fertilization-embryo transfer. She underwent an emergency caesarean section owing to severe headache, blurred vision, and general edema. A tissue connection between both ovaries was discovered by chance. In vitro fertilization is associated with several complications including ovarian hyperstimulation syndrome (characterized by swollen and painful ovaries), which results from the use of injectable fertility drugs, such as human chorionic gonadotropin (HCG)[4]. However, there seems to be no association between connected ovaries and ovulation induction complications. The extra tissue attached to an ovary may be asymptomatic and is not associated with infertility. In most cases, it may be left untreated with observation. But like in the present case, if both ovaries are connected and a rectangular-shaped tissue lies in the abdominal cavity, this extra tissue can cause pelvic adhesion or intestinal volvulus, strangulation, and torsion resulting in intestinal obstruction[5]. Therefore, the extra tissue should be removed.

CONCLUSION

Herein we report a case of a rare ovarian anomaly where both ovaries are connected with extra tissue. In this case, to prevent pelvic adhesion or intestinal obstruction resulting from volvulus, strangulation, and torsion, the extra tissue should be removed.

75839_Auto_Edited.docx

ORIGINALITY REPORT

12%
SIMILARITY INDEX

PRIMARY SOURCES

1	www.wjgnet.com Internet	37 words — 3%
2	link.springer.com Internet	31 words — 3%
3	www.ncbi.nlm.nih.gov Internet	27 words — 2%
4	Rosemarie Forstner. "Ovaries and Fallopian Tubes: Normal Findings and Anomalies", Medical Radiology, 2006 Crossref	18 words — 2%
5	f6publishing.blob.core.windows.net Internet	14 words — 1%
6	A Mi Kim, Jong Woon Kim, Yoon Ha Kim, Tae Young Kim, Hyun Kyung Ryu, Myeong Gyun Choi. "Corrective surgery using a gridiron incision for abdominal pain caused by a folded ovary in the third trimester of pregnancy", Journal of International Medical Research, 2021 Crossref	12 words — 1%

EXCLUDE QUOTES	ON	EXCLUDE SOURCES	< 12 WORDS
EXCLUDE BIBLIOGRAPHY	ON	EXCLUDE MATCHES	< 12 WORDS