Asymptomatic Auto Amputation of Normal Ovary

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Abstract

Free-floating intraperitoneal mass is rare and mostly is related to the ovary. Asymptomatic auto amputation of the ovary is extremely rare that may be due to torsion or inflammation and usually is diagnosed incidentally. We report an interesting case of this rare pathology. A 50-year-old female with postmenopausal bleeding prepared for hysterectomy is presented here. Intraperitoneal free-floating auto-amputated right ovary was encountered. During surgery, we can suspect it from free-floating mass intraperitoneal with failure to detect one of the ovaries attached to the uterus and the related infundibulopelvic ligament.

Keywords Auto amputation · Hysterectomy · Ovary · Free floating peritoneal

Introduction

Auto amputation of the ovary is very rare. The main pathological event of auto amputation is torsion of a normal ovary or an ovarian cyst followed by infarction and necrosis or less commonly infection [1–5]. While most of the cases of ovarian torsion presented with acute abdomen, it may be asymptomatic or delayed in diagnosis till infarction occurred with chronic torsion and later amputation. It may be diagnosed incidentally during a surgery as our case or during an ultrasound. [6–8].

Case Report

A 50-year-old woman presented to our department with postmenopausal uterine bleeding. Her last menses was since 18 months. The patient was healthy with no relevant medical history with only history of previous paraumbilical repair with mesh was reported. Her BMI was around 30. General examination was normal and vitals were stable. Abdominal and vaginal examination revealed enlarged uterus about 16 weeks gestational age size with no adnexal masses felt and with normal looking cervix. Ultrasound revealed grade zero

submucous uterine fibroid about 5 cm in size distorting the endometrial cavity with ill-identified endometrial line, and both ovaries could not be visualized. Her hemoglobin was 9 gm/ dl. Tumor markers were normal including serum CA125, LDH, AFP, HCG, and CEA. She was scheduled for hysterectomy. The abdomen was incised by low transverse incision. When the parietal peritoneum was opened, a free-floating mass similar to the ovarian shape and size with a yellow tan color and no ligamentous or direct connection to pelvic organs about 2 cm in dimensions in the right iliac fossa anterior to the intestine and colon was detected. The right-sided ovary was not visualized but the fallopian tube was seen. The left-sided fallopian tube and the ovary were normal. There was no history of previous abdominal surgeries related to the ovary. Total hysterectomy with salpingo-oophorectomy was done. The free-lying mass was sent for histopathology with high suspicion of ovarian tissues related to previous missed torsion attack. Frozen section was not available. The histopathology reported ovarian tissue with degenerative changes. The diagnosis of the auto amputation of right ovary was made and proliferative endometrium without atypia with submucous fibroid was reported (Figs. 1 and 2).

Discussion

The primary event of an auto-amputated ovary is torsion of a normal ovary or an ovarian cyst followed by infarction and necrosis. It is usually found incidentally during ultrasound or at surgery [1–3]. A free-floating intraperitoneal mass is extremely rare, and all are commonly originating from the

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Fig. 1 Abdominal examination revealed scar of previous abdominal mesh repair (a). Hysterectomy specimen with separable dull color smooth ovary (auto-amputated) (b). Ovary on cut section with degenerative changes (c and d)

ovary. Two cases in the literature were reported originating from other organs [9, 10]; one in a geriatric woman from the gall-bladder, due to torsion, and caused acute abdomen, while the other was from the appendix, due to torsion. There have been 36 cases of auto-amputated ovary in children reported at age from 1 day to 12 years of age and few reported in adults [1]. Pathologically, necrosis was detected in cases and calcification was seen in many cases and small amount of ovarian tissue was seen in specimens [1, 6]. The review of literature suggests that an auto-amputated ovary may re-implant into omentum or peritoneum, and possibly undergo malignant transformation [1, 3,

6]. Therefore, all auto-amputated ovary should be removed instead of a wait and watch approach [1, 5]. Clinicians should make sure about the presence of two ovaries on ultrasound and during surgery [10].

Conclusion

Auto-amputated ovary is very rare and mostly due to torsion. Most of the cases are diagnosed incidentally. All auto amputation of ovary should be excised. During surgery, we can

Fig. 2 Ultrasound showing submucous myoma compressing the cavity with ill-defined endometrial line and multiple nabothian follicles in the cervix

suspect it from free-floating mass intraperitoneal mass related to ovarian site with failure to detect both ovaries attached to the uterus and infundibulopelvic ligament along with no history of related ovarian surgeries .

Author's Contributions El Agwany had done the diagnoses and surgery along with writing the article.

Compliance with Ethical Standards

Ethical Disclosure The authors declare that the procedures followed were in accordance with the regulations of the relevant clinical research ethics committee and with those of the Code of Ethics of the World Medical Association (Declaration of Helsinki).

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Confidentiality of Data The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to Privacy and Informed Consent The authors have obtained the written informed consent of the patients or subjects mentioned in the article. The corresponding author is in possession of this document.

Conflict of Interest The author declares that he has no conflict of interest.

Informed Consent Informed consent was obtained from the patient included in the study.

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