Table 1 Clinical details of the patients with ovarian leiomyoma

Case Age Symptoms and signs USG/CT/MRI surgical approach concomitant ovary cyst

 (years) or uterine leiomyoma

1 24 pelvic mass for 2 months sex-cord stromal tumors myomectomy left ovary follicular cyst

2 65 pelvic mass for 20 years subserous myoma salpingo-oophorectomy multi-leiomyoma

 with hysterectomy

3 34 pelvic mass for 1 months ovarian tumor? myoma? Myomectomy no

4 57 pelvic mass for 1months subserous myoma salpingo-oophorectomy multi-leiomyoma

with hysterectomy

5 17 vaginal bleeding 3 months sex-cord stromal tumors myomectomy no

6 29 pelvic mass for 1months sex-cord stromal tumors myomectomy no

7 31 primary infertile for 4 years ovarian tumor? myoma? myomectomy no

8 51 pelvic mass for 10 years subserous myoma myomectomy multi-leiomyoma

USG: ultrasonography ;CT: computer tomography;MRI: magnetic resonance imagine

Table 2 Macro and microscopic features of ovarian leiomyoma

 Macroscopic features Microscopic features

Case Location & size Gross appearance Degeneration Frozen section

1 right,diameter 6.0cm clear border, uneven surface hyaline,calcification leiomyoma

2 left,diameter 6.0cm uneven surface hyaline,calcification leiomyoma

3 left inherent ligament, 3\*2\*2cm ovary inherent ligament leiomyoma leiomyoma

4 right,diameter 20cm, vascular engorgement fibro-leiomyoma,edema,hyaline mesenchymal origin

5 left,diameter 8.0cm rich blood supply, nuclear division(4/10) mesenchymal origin

 ascites 100ml

6 left,2\*2\*2cm, uneven surface no leiomyoma considered

7 right,diameter 6cm uneven surface no fibroma or leiomyoma

8 right, diameter 8cm myoma fusion,tortuous vessels no leiomyoma

Table 3 A review of the literature with ovarian leiomyoma cases proved by pathology

|  |
| --- |
| Reference Age Clinical characteristics Reference Age Clinical characteristics  |
| **Presented with Meigs' syndrome Presented with ascites and polymyositis**Kurai M (2005)[8] 79 chest pain & dyspnea ,CA125 163U/L Van Winter JT(1992)[9]  ascites & polymyositis Erdemoglu E(2006)[10]45 ascites and elevated CA125 levels **Presented with inguinal hernia****Presented with virilization/elevated T level** Prasad KR(1993) [11] indirect into labium majus Carpen O(1996)[12] 64 almost male type baldness,T level 20.4nmol/L **With abnormal histologic features** Parish JM(1984)[13] 68 virilization , depression,T level 1082ng/dl Moulla A(2017)[14] 58 with areas of myxoid stroma Mallya S(1990)[15]56 virilization,marked hirsutism,T level49nmol/L Ye zhao(2018)[16] 58  ovarian atypical leiomyoma **Presented with abnormal menstruation** Emovon EU (1999)[17] 24 nuclear pleomorphism,Abdel-Gadir A(2010)[18] 35 9 years secondary amenorrhoea mitotic avtivitysmall uterusLH 19.5 IU/l,FSH 3.8 IU/L  Erkaya S(2000)[19] 56 3-4 mitotic avtivity Ozcimen EE(2006)[20] 32 dysmenorrhea for six months Blue NR(2014)[21] 14  4 cm grew to 6.5 cm over  two years,slight nuclear enlargementLema VC (2013) [22]29 secondary amenorrhea, big, bilateral  **Accompy other tumor** **Presented with urinary symptoms** Dworniak T (2002) [23] 70 left kidney cancer Serenat Eris (2015) [24] 59 frequent micturition, uterin lipoleiomyoma Kojiro S(2003)[25] 84 rectal cancerAlshalabi O (2016)[24]53 constipation, urinary hesitation, mass between Khangar B(2017)[26] 42 LPD,6 years ago had  vagina and rectum, myxoid leiomyoma, total hysterectomy for a 20cm fibroidKhaffaf N (1996)[27] acute abdomen,bilateral hydronephrosis,  Bayram I(2007 )[28] PSTT mass 11.65 kg,  **Adolescence****Presented with appendicitis-like symptoms** Wei C(2008)[29]13 abdominal pain,nausea& vomitingTomas D(2009)[30] 31 appendicitis-like symptoms,associated with Guney M (2007)[31] 17 asymptom, 15 cm x 12 cm,an endometriotic cyst unilateral salpingo-oophorectomy Al-Shaikh AF(2015)[32] 52 right-lower abdominal pain,consistent with Lim SC(2004)[33] 17  huge, bilateral , acute appendicitis,goblet cell carcinoid of the appendix salpingo-oophorectomy**Presented with paraneoplastic syndrome** San marco L(1991)[34] 16 bilateral, left ovary Yumru AE (2010)[35] 55 epileptic seizure ,abdominal pain,30 x 28  preserved  x 15 cm ,CA-125 48 77 U/ml Seinera P(1997) [36] 25 epilepsy for 3years, bilateral,total 15 small nodulesAkizawa Y(2016)[37] 21 Gorlin syndrome, with a second hit in PTCH1 region**Presented with torsion**Guzel AI(2014)[38] 64 severe acute abdominal pain,peritoneal irritationKim M(2015)[39] 35 abdominal pain,peritoneal irritation,10-week gestation**Diagnosed during pregnancy**Zhao X(2014)[39] 28 acute abdominal pain following activity, 12-week gestation4.1×3.2cm grew to10.4×10cm,laparoscopic ovarian tumorectomy  Zorlu CG (1993)[40] 32 6-week gestation, 14\*9cm ,cycst left salpingo-oophorectomy Daniel Y(1997)[41] 31 bilateral,multiple,diagnosed during caesarean sectionHsiaoCH(2007)[42]41 diagnosed during caesarean section, left oophorectomy  |

T: testosterone ;LH:luteinizing hormone; FSH: follicle stimulating hormone;CA125: cancer antigen 125; LPD: leiomyomata peritonealis disseminata; PSTT :placenta site trophoblastic tumor