

# Unilateral Hematocolpos Mimicking Adnexal Mass in Pregnancy

## GEBELİKTE ADNEKSİYAL KİTLEYİ TAKLİT EDEN UNİLATERAL HEMATOKOLPOS

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### Summary

**Objective:** To report a unilateral hematocolpos which remained asymptomatic and undiagnosed at puberty and getting complicated during pregnancy by mimicking adnexal mass.

**Institution:** Adnan Menderes University, Faculty of Medicine, Department of Obstetrics and Gynecology.

**Methods:** A thirteen weeks pregnant complaining severe pelvic pain was evaluated for etiology.

**Result:** The ultrasonography revealed a thirteen weeks healthy fetus in the right hemiuterus with a cystic mass in 18x12 cm size located between the bladder and the left hemiuterus, extending to the hemiuterus posteriorly and to the mid portion of the vagina inferiorly. At laparotomy, uterus didelphys anomaly accompanying a cystic dilatation – hematocolpos was observed.

**Conclusions:** A genital anomaly which was not diagnosed at puberty perplexes the diagnosis by mimicking adnexal mass and may complicate pregnancy.

**Key Words:** Pregnancy, Hematocolpos, Uterus didelphys, Adnexal mass

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### Özet

**Amaç:** Pubertede semptom vermemiş ve tanı konulmamış bir unilateral hematokolposun, gebelikte pelvik kitleyi taklit ederek, gebeliği komplike ettiğinin ortaya konması.

**Çalışmanın Yapıldığı Yer:** ADÜTF, Kadın Hastalıkları ve Doğum AD.

**Yöntemler:** On üçüncü gebelik haftasında şiddetli pelvik ağrı ile başvuran hastada nedene yönelik inceleme yapıldı.

**Bulgular:** Ultrasonografide, sağ hemiuterusta 13 haftalık sağlıklı bir gebeliğin yanısıra, mesane ile sol hemiuterusun arasında başlayarak, sol hemiuterusun arkasından vajen orta kısmına kadar inen, 18 X 12 cm.lik kistik kitlenin, laparotomide, uterus didelphys eşlik eden, kistik dilatasyona uğramış bir hematokolpos olduğu saptandı.

**Sonuçlar:** Pubertede tanı konmayan genital anomaliler, pelvik kitleyi taklit ederek tanıyı zorlaştırır ve gebeliği komplike hale getirebilir.

**Anahtar Kelimeler:** Gebelik, Hematokolpos, Uterus didelphys, Adneksiyal kitle

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Complete duplication of vagina, cervix and uterus with obstructed hemivagina and accompanying renal agenesis is a rare abnormality of the müllerian ducts. Although it is diagnosed with menarche by manifesting its symptoms, diagnosis may be delayed until pregnancy due to uncertainty of symptoms or socio-cultural reasons. We report a case of thirteen weeks pregnancy with uterus didelphys, hematocolpos in obstructed hemivagina and ipsilateral renal agenesis.

### Case

A 19-year-old primigravid woman was admitted to emergency room with a complaint of severe

blunt pelvic pain and this was the first admission to any prenatal care unit up to that time. At pelvic examination, while the vagina found to be slightly bulging from the upper left side, uterus was rough and pushed up to the umbilicus by a soft mass located in the pelvis. An ultrasound scan revealed the existence of uterus didelphys and a normal 13-weeks single pregnancy was determined in the right cavity. The right hemiuterus had a normal cervix and vagina. The left hemiuterus was normal in terms of length but had formed an angle of 90° with the right gravid hemiuterus and the cavity was empty. Transvaginal and transrectal ultrasonography revealed an 18x12 cm cystic mass located

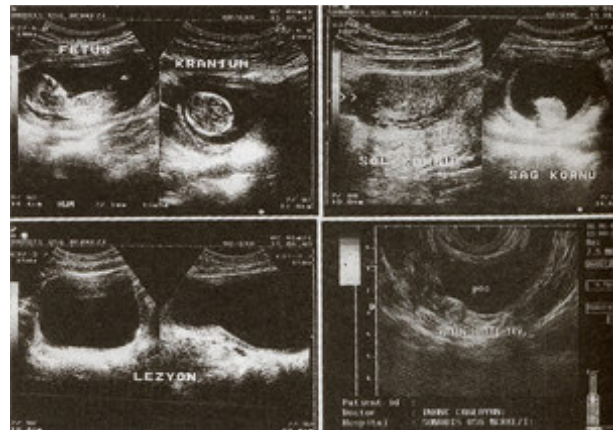
between the bladder and the left hemiuterus, extending to the posterior face of the left hemiuterus posteriorly and to the mid portion of the vagina inferiorly (Figure 1). Both of the uteri were pushed out of the pelvis which was filled entirely by the mass. The left kidney was agenetic. From her history it was learnt that her menarche occurred when she was 13 years old and had regular menstrual periods with mild dysmenorrhea. However, she thought this symptom as a natural consequence of menstruation. We considered the pathology as a uterus didelphys with embryonic remnant cyst, hematocolpos or adnexal cystic mass.

The pain was persistent and laparotomy was performed a week after admission. At the exploration, uterus didelphys anomaly accompanying a cystic dilatation–hematocolpos, with a thick muscular wall at the level of cervix was observed.

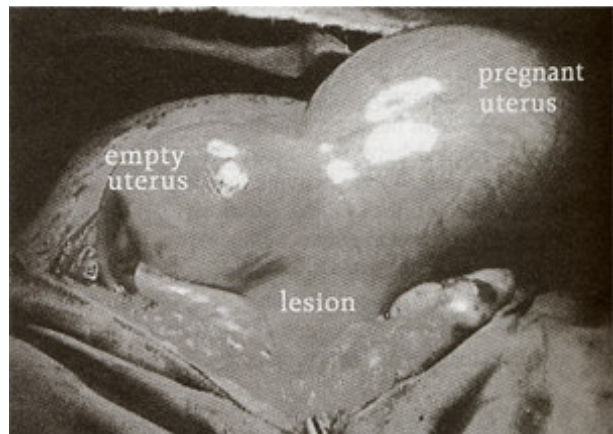
A total of 400 ml blood was aspirated from the obstructed hemivagina of the non-pregnant uterus. A communication between the two hemivaginas was accomplished by a septal ablation performed on the proximal part of the vaginal septum. A Foley catheter placed in the hematocolpos was taken out from the vagina. The biopsy of the cystic mass wall was reported as muscular layer with lining epithelium.

After a week from the removal of catheter, a pyocolpos developed and it was managed successfully by drainage. The orifice of intervaginal septum was closed spontaneously and hence the drainage was stopped. The patient began to complain from leukorrhea and dysuria at the 17<sup>th</sup> and 28<sup>th</sup> weeks of pregnancy and the diagnosis was vaginitis. At the 37<sup>th</sup> week of pregnancy labor had begun spontaneously and a cesarean section was performed to avoid soft tissue dystocia and to prevent the contamination of fetus by pyocolpos.

After delivery via a low uterine transverse incision, the cystic obstructed hemivagina was incised and the purulent material outflowed. Apgar score of the newborn was calculated as nine. A new large orifice was created with excision and marsupialization of intervaginal septum at the nadir point of blind hemivagina and a sufficient



**Figure 1.** The fetus located in right uterus (left upper), the empty left uterus and the pregnant right uterus (right upper), the lesion (left lower) and transvaginal appearance of lesion (right lower).



**Figure 2.** The pregnant and empty uteri were pushed upward by the lesion of hematocolpos (posterior view). The upper part of lesion was extending to the isthmus of both uteri.

drainage was obtained. The orifice remained patent for two months following discharge.

### Discussion

The specificity of the association of uterus didelphys, obstructed hemivagina, and ipsilateral renal agenesis was confirmed by the large series of Stassart et al. (1). According to the authors, the findings suggested a specific developmental anomaly of the müllerian ductal system, probably secondary to a wolffian duct anomaly (1). This defect may manifest as a duplication of any or all parts of the female reproductive system.

The specific association of uterus didelphys, obstructed hemivagina, and ipsilateral renal agenesis may be the result of an abnormal development of the caudal portion of one of the wolffian ducts with secondary involvement of the ipsilateral müllerian duct (1).

Although the initial symptoms of our patient had begun after menarche, she refused to admit to any health center due to some cultural anxiety or fears of being perceived as a "patient" in her natural social community. The other contributing factor in the delay of her admission was the mildness of symptoms. It is well known that obstetric outcome is satisfactory with early diagnosis and appropriate treatment. Growing pregnancy made her symptoms worsened and hence her first admission to a health center was delayed until pregnancy.

Uterine anomalies are one of the various processes in the pelvic organs that present themselves as adnexal mass in pregnancy (2). The point should be considered in the differential diagnosis, is whether these masses may also be embryonic remnants or not. A girl with unilateral renal hypoplasia, ipsilateral Gartner's duct cyst and ipsilateral obstructed hemivagina has been reported (3). Significance of the present congenital anomaly, encountered during pregnancy, is its ability to mimic an adnexal mass and confuse the diagnosis during pregnancy. The findings of cystic pelvic mass and ipsilateral renal agenesis should arouse the suspicion of this anomaly (4). Although unilateral hematomocolpos was our differential diagnosis, huge cyst with the thick vaginal septum and mild symptoms made us to consider it as a cystic adnexal mass with pregnancy. Because of presence of a cystic mass in a size of 18 cm pushing the double and large pregnant uterus upward, we preferred to perform explorative laparotomy instead of diagnos-

tic laparoscopy. Transvaginal or laparoscopic approach seemed to us as risky during the pregnancy.

In retrospect, a transvaginal approach can be considered to avoid laparotomy and this approach would also allow one to perform a vaginal birth.

According to our limited experience in this case, it is more effective to provide a larger septal ablation or marsupialization for drainage to prevent pyocolpos, vaginitis and related complications following either vaginal or abdominal approach. Transvaginal marsupialization can be helpful for both in the diagnosis and the treatment of the cystic mass with congenital reproductive organ anomaly if it would be thought as a low risk for the pregnancy outcome.

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