

Hydatid Disease of Uterus: An Exceptional Site of Localization

ENDER RASTLANAN YERLEŞİM YERİ OLARAK UTERUSTA KİST HİDATİK

Dr.Bülent URAN*, Dr.AtMa ERLER", Doç.Dr.Ümit BAYOL

* Minister/ of Health Hospital of Gördes,

** The Maternity Hospital of Social Security Foundation, İzmir,

*** Department of Pathology, SSK Tepecik Hospital, izmir, TURKEY

SUMMARY

Hydatid disease of uterus is unusually encountered in gynecologic practice. The reported case typifies as an example of the rare secondary localization of pelvic echinococcosis. Two cysts of hydatid were found to be settled in the myometrium of a hysterectomy material. Ciinipathologic features and pathogenesis of the disease were discussed.

Key Words: Ecinococcal disease, Uterus

Anatolian J Gynecol Obst 1993, 3:162-164

Hydatid disease is encountered relatively frequent, where the triad of man, dog and sheep or cattle is common. Hydatid cysts of canine tapeworm *ecinococcus granulosus* in the human has been well known in Turkey since the incidence of the disease appears to be endemic.

Clinically hydatid disease is usually confined to liver, lungs and bones. Hydatid cysts of the female genital organs are extremely rare and almost secondary to rupture of a liver cyst, for this reason experience in gynecologic practice is limited.

The greater majority of the reported cases for pelvic hydatid cysts were generally located in the neighboring regions of the female genital organs (1,2,3,4).

Our case has different special characteristics of two cysts which were located totally in the myometrium of an uterus.

Geliş Tarihi: 8.5.1992

Kabul Tarihi: 3.10 1992

**Yazışma Adresi: Dr.Bülent URAN
Devlet Yolu Cad. 94/1
45750 Gördes**

ÖZET

Jinekoloji pratiğinde uterusun kist hidatiğine son derece nadir rastlanmaktadır. Bu çalışmadaki olguda pelvik kist hidatiğin nadir sekonder yerleşimi bildirilmektedir. Bir histerektomi materyelinde iki adet kist hidatiğin yerleştiği saptanmıştır. Hastalığın klinikopatolojik özellikleri vepatojenezi tartışılmıştır.

Anahtar Kelimeler: Kist hidatik, Uterus

T Klin Jinekoloj 1993, 3:162-164

CASE REPORT

A 31 year old Caucasian, gravida 1, para 1, presented with 6 months history of Increasing pressure sensation on the lower abdomen. She was seeking medical advice for her secondary infertility.

She had been operated 3 times previously, for hydatid diseases of the lung, the liver and abdominal cavity. A cyst of hydatid disease was extracted from abdominal cavity 7 years before. Her menstrual periods were regular with 28 days intervals.

On pelvic examination, uterus was found enlarged to the size of 14 weeks gestation. Diagnosis of myoma uteri was made by clinicians. For this reason there was no special laboratory examination concerning hydatid disease, such as echography, pelvic roentgenogram and serologic skin tests.

Laparotomy revealed roughly enlarged uterus and cystic masses in the fundus. There was no other pathologic finding in the abdominal cavity except minor adhesions from previous abdominal operation.

Abdominal hysterectomy and left salpingooferection was performed. The patient did well postoperatively. Clinical examination of other suspected organs didn't disclose any other hydatid cyst after 6 months from the operation.

In pathologic examination, grossly the fundus of the uterus increased in size (13x11x17 cm). Cystic masses were expected when palpated externally.

When the anterior wall of the uterus was cut through the long axis, two cuboid cysts measured 6 and 7 centimeters in diameter that were located in the myometrium was found (Figure 1).

Daughter vesiculae that were containing small pieces of cuticular membrane were seen from sevred cysts after pouring of clear fluid (Figure 2).

The thickness of fundus wall was approximately measured as 7 cm on the floor and 4 cm on the upper part of the cysts.

The endometrium was mildly thickened at the around of cuticular membrane.

DISCUSSION

Primary involvement of the pelvic organs by echinococcus is extremely rare and is not accepted by some investigators (1). In the published cases, localizations of the cysts are almost always secondary to rupture of another cyst into peritoneal cavity from other abdominal organs.

Various statistics were published concerning the rate of pelvic hydatid disease. In the United States the incidence of genital involvement was reported to be 2 in 658 patients who have undergone operation for hydatid disease (2). Reports from Tunisia and Greece for the genital localization of the disease which is encoun-

tered at the abdominal operations had the incidence of 1.8% and 0.11% resectively (1,4).

Although the disease is endemic and is continuing to create public health problem in Turkey, there is no published statistical data showing the incidence of the disease in genital localization. In our records of the last 15 years, we found 14 cases of pelvic hydatid cysts among the 1842 adnexial masses (0.76%) (unpublished data).

Hydatid cysts of the female genital organs may be single or multiple. The common sites of cysts in the pelvis were uterovesical space, parametrium, pouch of douglas, adnexia and ovary (1,3). Almost in all cases, cystic masses or conglomerates were formed with neighboring organs (2). They vary greatly in size, measuring from 1 to 20 centimeter in diameter. Bickers, in a series of 532 Lebanese patients with hydatid disease, found ovarian involvement in 0.75% and uterine cysts in 0.38%, and noted that there were only 10 cases of primary uterine cyst recorded (3).

Myometrium and vicinity of endometrium are very rare places for the localization of the cysts (5). Generally a misdiagnosis of myoma uteri was made in such rare localizations (2,3). In published studies, we couldn't find a good description and a picture of the myometrial settlement of these cysts. In our case two cysts, 6-7 cm in diameter of each, were placed wholly in the myometrium (Figure 1).

The pathogenesis of involvement of the female genital organs in fact has not been clearly explained.



Figure 1 Eccinococcal cyst intermingled with myometrial tissue.

Anatolian J Gynecol Obst 1993, 3



Figure 2. Daughter vesiculae are seen inner part of the cyst wall.

Several theories have been advanced to interpret the entry of *Echinococcus* into the female genitalia.

It is well known that the parasite easily access to the liver via the portal vein and 50% of cases are encountered in this organ. It is accepted that there are two ways of dissemination for parasite to other organs (4).

1. The scolices can pass the filter of liver and enter general circulation after passing through vena cava, right side of the heart, filter of the lung and the left side of the heart.

2. Peritoneal fluid seems to be another mean of transportation of the scolices to the pelvic organs when a cyst of liver has ruptured into the abdominal cavity spontaneously, after trauma or after a surgical intervention.

The sizes of the hexacanthus embryo, which measures 20-25 microns in diameter, is larger than the lumen of most capillaries, but the elasticity of embryo enables it to be molded easily to the smaller capillary sizes and may reach to myometrium via blood circulation.

The rarity of involvement of the female reproductive tract in *Echinococcosis* can be attributed to the density of the capillary bed in these organs especially in myometrium. Wide and anastomosing capillary beds are not suitable for the scolex lodgement than regions with narrow capillary filter such as bone and kidney (1).

Another possible passage to myometrium may be the transportation of spilled embryo via the oviduct (3). It seems improbable that time period would be sufficient for maturation of the scolex to the cystic form before to be evacuated by endometrial spillage in regularly menstruating woman.

The clinical presentation of hydatid disease in genital organs are not specific. Symptoms of extrauterine localizations generally mimic those of ovarian cysts or carcinomatosis (2). They manifest themselves by extrinsic pressure upon neighboring organs. In gynecologic examination uterine cysts can be misdiagnosed as a degenerated myoma or pregnancy (2,3). The patient's or family's history of previous hydatid disease must alert the physician about such a rare possibility.

Polycystic densities due to calcification in the reactive host tissue which surrounds the cysts, visible on plain X-ray, are highly suggestive of hydatid disease (5). Ultrasonographic and computed tomographic findings can be valuable as a diagnostic aid (5).

The treatment of hydatid cysts of female genital organs is surgical. Hysterectomy had been performed in our case.

REFERENCES

1. Georkapulos PA, Gogos CG, Sanyannis HG. Hydatid disease of the female genitalia. *Obstet Gynecol* 1980; 55:555.
2. Rahman MS, Rahman J, Lyskiewicz A. Obstetric and gynecological presentation of hydatid disease. *Br J Obstet Gynecol* 1982; 89:665.
3. Bickers WM. Hydatid disease of the female pelvis. *Am J Obstet Gynecol* 1970; 107:447.
4. Baba A, Chaieb A, Khairi H, Keskes J. Profil epidemiologique de l'hydatidose pelvienne. A propos de 15 cas. *J Gynecol Obstet Biol Reprod* 1991; 20:657.
5. Guadenna F, Cemmen Lebbene I, Lebbi I, Koubaa A, Ben-zined T, Benjilani S. Hydatidose intra-uterine. A propos d'un cas. *J Gynecol Obstet Biol Reprod* 1990; 19:725.