Isolated renal hydatid cyst: Diagnosed as an incidentaloma during pregnancy

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ABSTRACT

A twenty five year old second gravid woman was referred with a cystic mass in the right lumbar region. The cystic mass was diagnosed by routine ultrasound done for fetal growth. Antenatal period was otherwise uneventful. The patient had vaginal delivery at 38 weeks. She was evaluated in the postpartum period and was diagnosed to have renal hydatid cyst intraoperatively. Postoperative period was uneventful.

Key words: hydatid cyst, kidney, pregnancy

INTRODUCTION

Hydatid cyst complicating pregnancy is an uncommon condition.[1] With the advent and the widespread use of ultrasound, the chances of finding an asymptomatic lesion incidentally (Incidentaloma) has increased. Here we discuss an asymptomatic pregnant woman who was referred with a cystic mass in the right lumbar region

CASE REPORT

Twenty five year old Gravida$_2$ para$_1$ live$_1$ at 32 weeks of gestation referred for evaluation and management of a right renal mass complicating pregnancy. She was having regular antenatal checkups, and her antenatal period was otherwise uneventful. The right renal mass was detected incidentally during a fetal growth scan. Obstetric examination revealed a pregnant uterus with fetus in cephalic presentation corresponding to 32 weeks. There was no obvious mass palpable in the right lumbar region. Ultrasound examination confirmed the same and mass of mixed echogenicity measuring 10 x 9 cm was found arising from the right kidney. She was evaluated by the urologist for the complex renal cyst and the decision was made to reevaluate and intervene in the postpartum period. Serial ultrasound scans showed adequate fetal growth and there was no obvious increase in the size of the mass. At 38 weeks of pregnancy, patient went into spontaneous labor and delivered a live female baby of 3.3 kg. Post partum period was uneventful and was evaluated with computer tomography scan which was consistent with hydatid cyst. She was explored and subjected to nephron sparing excision of the cyst. The cyst was seen occupying the entire upper pole of the right kidney. Histopathological examination report was consistent with renal hydatid. Postoperative period was uneventful and was put on tablet albendazole for six weeks postoperatively. Six weeks after the surgery, a repeat ultrasound of the abdomen did not reveal any mass lesion in the abdomen.

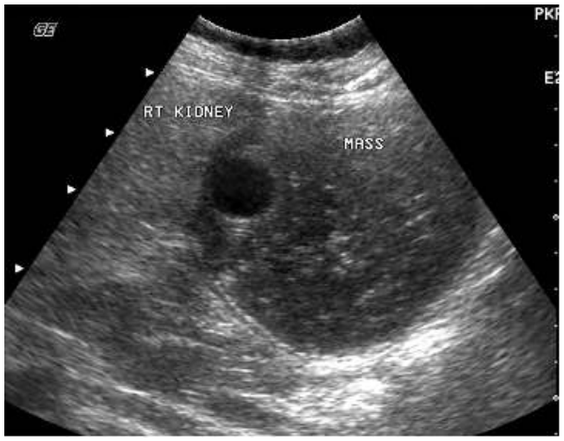

Figure 1: Ultrasound picture of the mass in upper pole of right kidney

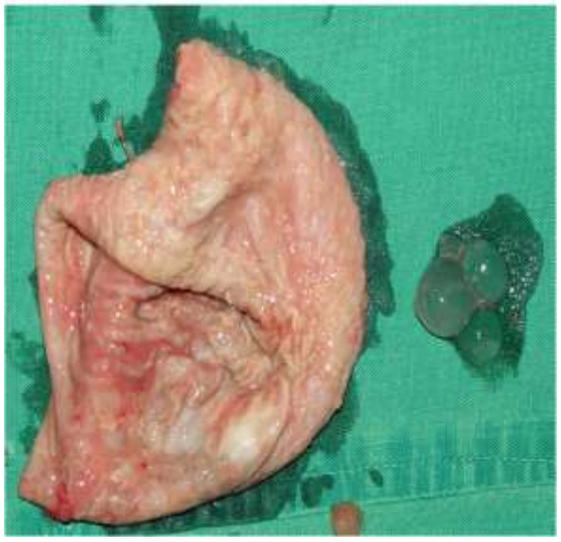

Figure 2: The cut specimen of the hydatid cyst with few daughter cysts.

DISCUSSION

The incidence of hydatid cyst in pregnancy is about 1 in 20,000 to 1 in 30,000.[1] Hydatid cysts develop most commonly in the liver where they are seen in 60-70% of the patients.[2] In a study of abdominal echinococcosis during pregnancy by Manterola, hydatid cyst involving the liver were seen in 91.7% and those involving the kidney were seen only in 8.3% of the patients.[3] This instant case was unusual because the hydatid cyst was confined to the kidney and the liver was normal. The problems to be anticipated in diagnosed cases of hydatid cyst are anaphylaxis, cyst infection and preterm delivery.[1,4] Fortunately, these complications were not encountered in our patient. The treatment of hydatid disease is mainly surgical.[3] The preferred operative option used is cyst capsulorrhaphy and insertion of hypertonic saline. The optimal timing of operation in a pregnant patient is the second trimester because there is a lower risk of spontaneous abortion and the uterus is not in the way of the of field. During surgery, the abdomen should be packed because rupture of the cyst can result in anaphylaxis and diffuse seeding. The cyst should be aspirated through a closed suction system and flushed with a scolidal agent. There is a role for Albendazole in the management of Hydatid cysts in the second trimester after the period of organogenesis.

CONCLUSION

The hydatid cyst should be a differential diagnosis for any cystic mass in the abdomen. Non-invasive techniques can be used for its confirmation. This will help us to take precautionary steps to prevent anaphylaxis during surgery and also to start tablet albendazole in the preoperative period.

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REFERENCES

1. Rahman MS, Rahman J, Lysikiewicz A. Obstetric and gynaecological presentations of hydatid disease. *Br. J Obstet Gynaecol. 1982;*89(8):665-670.
2. Haxhimolla HZ, Crowe P. Hydatid disease of the liver in pregnancy. *ANZ J. Surg*. 2001; 71: 692-693.
3. Manterola C, Espinoza R, Munoz S, et al. Abdominal echinococcosis during pregnancy: clinical aspects and management of a series of cases in Chile. *Trop. Doc*. 2004;34:171-3.
4. Manterola C, Acenio L, Garrido L, Bahamondez JC, Barrosco M. Hepatic hydatid disease. Descriptive study of clinical and therapeutic aspects of a consective series . *Rev Chill Cirugia.* 1997;49:352-9.