ELEVEN YEARS FOLLOW-UP OF RENAL HYDATID CYST

Dr. M.A. Taher

Renal hydatid cyst is rare in Bangladesh. Therefore, we like to report a case of renal hydatidosis followed up for eleven years.

CASE REPORT

A 48 year-old Muslim male coming from Nilphamari district presented at NMC Dinajpur with pain and progrssively enlarging lump in left loin of about 6 months duration since December 1991. The lump was taken note of because of heaviness in the left abdomen. There was no urinary or bowel disturbance.

EXAMINATION

His pulse was 84/min and BP was 138/95 mmHg. A lump of 20x16cm size located in left hypochondrium to lumbar region, with well-defined margins, smooth surface and variable consistency was felt, which was bimanually palpable. Chest revealed nothing abnormal and all the other systems were normal clinically.

INVESTIGATIONS

Ultrasonography (USG) revealed a huge multicystic left kidney. It was functioning poorly as shown by hippuran (I-131) renogram and DTPA (Tc-99m) renal scan.

MANAGEMENT

After exploration, partial nephrectomy was done on 23 July 1992 to remove the hydatid cysts. The patient was put on a long course of mebendazole (720 tablets of 100 mg).

FOLLOW-UPS

The patient was symptom-free for many months.Post-operative scan on 21 January 1993 showed a small left kidney with uniform concentration of DTPA. On 10 July 1995 he presented at NMC Rangpur with recurrence of symptoms.A multiloculated cyst was seen by sonography in the left loin,DTPA renal scan showed a normal right kidney and poorly visualised left kidney. The patient could not afford a repeated surgery, received albendazole 800 mg/day orally for 15 days and improved considerably. He refused further treatment, but came again on 30 May 2002 with a lump in the left loin. The patient gave a history of occasional albendazole therapy (400 mg daily for 2 weeks) USG showed that the lump was a multiloculated cyst of 120X153 mm in size. The patient was given albendazole 800 mg twice daily for 15 (fifteen) days. He was improved and USG on 19 August 2002 showed further reduction of the size of lump (98X115 mm). On January 22,2003,he was clinically well and USG showed no cyst. Although we have no laboratory proof, but we assumed from therapeutic success that it was a recurrence of echinococcosis.

DISCUSSION

Echinococcal infection in adults are mostly in the liver (54-77)%. Pulmonary hydatidosis (9-30%) ranks second to the liver. Hydatid cysts are commonly found in the liver and cause compression of liver cells which can lead to biliary stasis and cholangitis due to secondary infection. Lung cysts are more spherical than those in the liver and their rupture can result in hemoptysis from bursting of pulmonary capillaries. The small percentage of organisms that escape liver and lung may enter the systemic circulation and infest different organs [e.g. heart, kidney, orbit, breast, skeletal muscles, spleen, thyroid gland (0.1%), urinary bladder] and none has escaped from being infested.1-11 In sheep-raising districts, hydatid cyst of the kidney is common, occasionally the patient complains of passing "grapeskin" (ruptured daughter cysts) in the urine, 12 but renal hydatid cyst is rare in Bangladesh and therefore we like to report the present case. Patients with recurrent hydatid cysts (or polycystic disease) are often treated by mebendazole or albendazole or percutaneous treatment. Ultrasonography is a useful way to monitor the progresses. Bezzi et al.13 followed 141 abdominal hydatid cysts (108 in the liver) in 63 patients treated by these drugs, however, 40% remained sonographically unaltered. 13 Radionuclide studies may help in these situations. Ultrasound findings in hydatid cyst may be pure fluid collection, split wall, septa, heterogeneous echo or reflecting thick walls.14 Mebendazole(40-50 mg/kg/ day) for at least 3 months or more effectively albendazole 10-15 mg/kg/day in several monthly courses separated by intervals of 14 days15 has been used for inoperable hydatid disease and to reduce the infestivity of cysts preoperatively. Double percutaneous aspiration and ethanol injection(D-PAI) of hydatid cyst is an effective treatment, but there is a risk of anaphylactic shock, occasionally fatal--two deaths were reported by Giorgio et al. and Men et al., 16-18 although they used mebendazole(3 g/d) or albendazole(800 mg/d) 1 week before and 3 weeks after D-PAI and betamethasone(12 mg/d IV) as prophylaxis for allergic reactions for 3 days before and 2 days after each D-PAI session.

REFERENCES

 Taher M. A. Renal hydatid cyst. J Indian Med Assoc 95: 196,1997.

- Makki H, Renal hydatid disease. Br. J. Surg 54: 265-91, 1967.
- Halim A, Vaezzadeh K. Hydatid disease of the urinary tract. Br J Urol. 52: 75-8, 1980.
- Von Sinner WN, Hellstrom M, Kagevi I, Norlen BJ. Hydatid disease of urinary tract. J Urol. 149: 577-80, 1993.
- Thomas A, Bhat. S, Jacob AJ. Echinococcal disease of the kidney. A case report. JIMA 94(5): 178, 1996.
- Singh S, Griwan MS, Kalra U, Dua R, Singh S. Retrovesical Hydatid cyst JIMA 94(5): 178, 1996.
- Przybojewski JS. Primary cardiac hydatid disease. S Afr Med. J 65(11): 438-442, 1986.
- Deodhar SD et al. Hydatid disease of the urinary bladder. J Postgrad Med 32(1) 46 -48, 1986.
- Benini P et al. A case of recurrent Echino coccus of the muscle. Minerva Chir. 37(9): 845-852,1982.
- Gogeri B, Punekar RAA, Khan WA. Hydatid disease: A case report. Bangladesh Med. J 19: 131-132, 1990.
- 11. Franquet T, Montes M, Lecumberri FJ, Esparza J, Bescos JM. Hydatid disease of the spleen: imaging findings in nine patients. AJR 1990; 154: 525-8.
- Rains AIH, Mann CV (Revised)-Bailey & Love's A short practice of surgery. 20th edn. 1988 ELBS/H.K. Lewis, London.
- Bezzi M, Teggi A, De Rosa F, Capozzi A, Tusa G,Bonifacino A,Angelini L. Abdominal hydatid disease: US findings during medical treatment. Radiology 162, 91-95, 1987.
- Chehida FB, Gharbi HA, Hammou A. Bellagha I, Amor NB, Gargouri M. Ultrasound findings in hydatid cyst. Ultrasound Quarterly 15: 216-222, 1999.
- Filice C, Branetti E, Crippa F, Bruno R, Treatment of Echinococcal Abdominal cysts. Ultrasound Quarterly 15: 223-233, 1999.

- 16. Giorgio A, Tarantino L, de Stefano G, Francica G, Esposito F, Perrotta A, Aloisio V, Farella N, Mariniello N, Coppola C, Caturelli E. Complications after interventional sonography of focal liver lesions: A 22-year single-center experience. J Ultrasound Med 2003; 22: 193-205.
- 17. Men S, Hekimoglu B, Yucesoy C, at al. Percutaneous treatment of hepatic hydatid cysts: an alternative to surgery. AJR Am J Roentgenol 1999; 172: 83-89.
- 18. Bastid C, Azar C, Doyer M, Samel J. Percutaneous traetment of hydatid cysts under sonographic guidance. Dig Dis Sci 1994; 39: 1576-1580.