

YAŞLI BİR HASTADA POSTERİOR FOSSA HİDATİK KİSTİ (Olgu Bildirisi)

HYDATID CYST OF THE POSTERIOR FOSSA IN AN AGED PATIENT
(Case Report)

Yusuf TÜZÜN, Çetin R. KAYAOĞLU, Hakan Hadi KADIOĞLU, Erhan TAKÇI
Mustafa ÖZTÜRK, İsmail Hakkı AYDIN
Atatürk Üniversitesi Tıp Fakültesi-Nöroşirurji Anabilim Dalı, 25240-Erzurum

Özet:

Posterior fossa hidatik kisti çok nadir rastlanılan bir parazitozdur. Biz şu ana kadar literatürde yayınlanmış 30 olgu bulduk. Bu makalede 1995 yılı başında kliniğimizde posterior fossa hidatik kisti tanısıyla tedavi edilen bir olguyu nadir görülen lokalizasyonu ve yaşlı bir hastada bulunması nedeniyle sunduk.

Anahtar Kelimeler: Hidatik kist, Posterior fossa, Ekinokokkus

AUTD 1995, 27: 25-27

Introduction:

Hydatic cyst of posterior fossa is very rare. The first case of hydatic cyst of posterior fossa was reported by Maunsel in 1889 (1). We found only 30 cases in the literature (1-8) CT scanning is the procedure of choice for diagnosing hydatic cyst, and the CT features of this condution are practically pathognomonic (9). The only cure for hydatic cyst is surgical removal without rupture (5).

Summary:

Hydatid cyst of posterior fossa is very rare. We found only 30 cases in the literature. Recently, a new case of hydatid cyst in the posterior fossa was treated by our department. This case is reported because of its rare location.

Key words: Hydatid cyst, Posterior fossa, Echinococcus

MJAU 1995, 27: 25-27

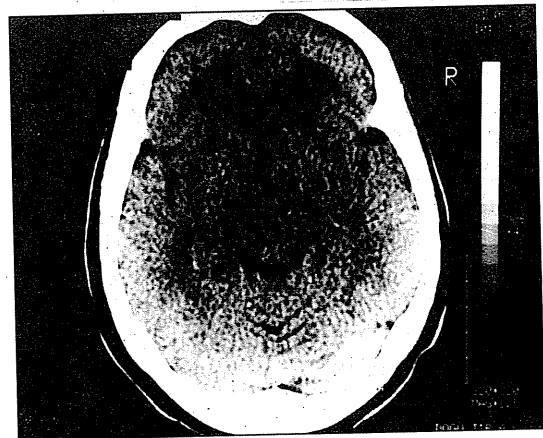
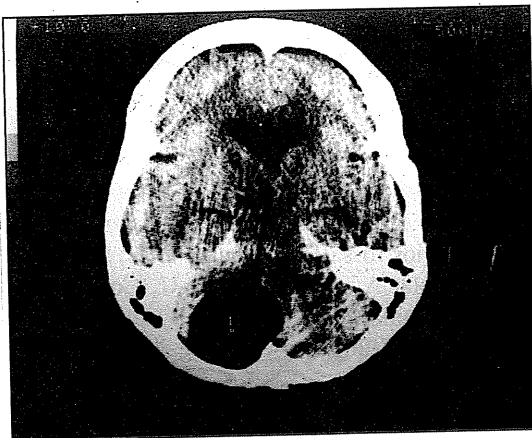
Case Report

This 53-year-old woman was entered to our clinic on January 17, 1995. Her complaints were headache, nausea and disturbance of gait for about two weeks.

On examination she had evidences of cerebellar dysfunction on the right side. Her gait was ataxic with the greatest disturbance in the right leg. There was nystagmus in all directions of gaze.

Plain X-ray films of the skull and chest were normal. A computed tomographic (CT) scan

Figure 1: Pre- and postoperative CT scan



demonstrated a huge cystic mass in the right cerebellar hemisphere (Fig. 1). The cyst was shifting the aqueduct, without causing hydrocephalus. This mass had an attenuation value similar to that of cerebrospinal fluid and there was no enhancement with injection of contrast medium. This appearance was consistent with a Hydatid cyst. Casoni's and Weinberg's tests were negative. Extensive postoperative search for another cyst elsewhere in the body was negative.

A suboccipital craniotomy was performed and the posterior fossa was exposed on January 19, 1995. A cyst was seen just beneath the dura of the right hemisphere. The surface overlying the cyst was very thin, slightly stretched, and bluish. As a precaution against spillage and dissemination during operation, the cyst was carefully packed off with cottons. Because the cyst membrane was very thin, no attempt was made to remove it with hydrostatic expulsion instead the cyst was entered with a fine needle and aspirated with an injector. After aspiration the cyst became slack and cyst membrane was easily pulled out with a forceps. Cavity was washed with 3% hypertonic saline solution, later was filled by irrigation with isotonic saline.

Postoperative course was uneventful. All symptoms completely disappeared within seven days. On control CT scanning ten days later, the pneumocephalus of the right cerebellar hemisphere was observed to be 2 cm. diameter (Fig. 2. a). She was discharged on the twelfth day of her operation.

CT on February 15, 1995 was shown decreasing pneumocephalus (Fig. 2. b). And late CT scanning (May 31, 1995) after the operation showed no pathological findings except small-density postoperative differences (Fig. 3). The patient is well 8 months after operation.

In our case, we used albendazole for prophylactic. The daily dose was 10 mg/kg, taken three times a day with main meals, in 45 days.

Discussion

Hydatid cyst of posterior fossa is very rare. The first case of hydatid cyst of posterior fossa was reported by Maunsel in 1889 (1). We found only 30 cases in the literature (1-8). The disease is worldwide in distribution and is found especially in agricultural and sheepraising communities (3,8,10,11). It is much more common in children compared with adults is 7:1 (3, 8).

Hydatid cysts contain the oncospheres of *Tinea echinococcus* (*Echinococcus*

granulosus), the dog and wolf tapeworm. The fouling of watercress beds by infested dogs is a well recognized source of infestation of humans. Swallowed ova reach the small intestine. The liberated embryos pass through the mucosa to the portal bloodstream, in which they are carried to the liver. In a small proportion of cases, they reach the systemic circulation and may then pass through the lungs, eventually settling in the brain and other organs. Humans, pigs and sheep are the intermediate hosts of the parasite (9).

There is nothing of etiological specificity in the neural symptoms, which may include seizures, symptoms and signs of increased intracranial pressure, and the local parietic effects of the mass lesion at the hydatid cyst of the brain (9).

CT scanning is the procedure of choice for diagnosing hydatid cyst, and the CT features of this condition are practically pathognomonic. The scan shows a spherical cystic lesion with a sharply defined border with Hounsfield unit values similar to that of water or cerebrospinal fluid (2, 12, 13).

The only cure for hydatid cyst is surgical removal without rupture. Generally hydatid cysts are easily removed by hydrostatic expulsion by squirting fluid around and under the cyst (5). In our case we could not perform this, in fear of rupturing the cyst, because of very thin membrane. If a cyst is too large to remove without rupture, the cyst content may be sterilized by injecting formalin, hydrogen peroxide or 3% hypertonic saline (6).

Experimentally and clinically, mebendazole and albendazole have been shown to be effective in the medical treatment of hydatid cysts (14, 15). Todorow et al (15) reported a patient with primary multiple hydatid cysts who was treated with albendazole.

References:

1. Maunsel L. Cited by Boixsados (ref 12).
2. Abbasion K, Rahmat H, Ameli No, Tofanoli M. Computerized tomography in hydatid cyst of the brain. *J Neurosurg* 1978; 49:401-11.
3. Arasil E, Erdoğan A. Hydatid cyst of the posterior fossa. *Surg Neurol* 1978; 9: 9-10.
4. Canbolat A, Önal Ç, Kaya U, Çoban TE. Intracranial extradural hydatid cyst: Report of three cases. *Surg Neurol* 1994; 41:230-4.
5. Carrea R, Dowling E, Guavara JA. Surgical treatment of hydatid cyst of the central nervous system in pediatric age

- (Dowling's technique). Child's Brain 1975; 1: 4-21.
6. Gökalp HZ, Erdoğan A. Hydatid cyst of the aqueduct of Sylvius. Case Report. Clin Neurol Neurosurg 1988, 90:83-5.
 7. Tarcan B. Hydatid cyst of the brain. A study of eight cases. J Int Coll Surg 1961; 36: 334-5.
 8. Villajero F, Blanquez MG, Arcas J, Pascual-Castroviejo I, Esteban F. Hydatid cyst of the posterior fossa: case report. Neurosurgery 1983; 12: 228-9.
 9. Sharma SC, Ray RC. Primary hydatid cyst of the brain in an adult: report of a case. Neurosurgery 1988; 23: 374-6.
 10. Boles DM. Cerebral echinococcosis. Surg Neurol 1981; 26: 280-2.
 11. Schijman E. Hydatid cyst of the posterior fossa. Neurosurgery 1985; 17:1014-15 (letter).
 12. Boixados JR. Hidatizosis del Sistema Nervioso Central. Madrid, Publicaciones Controladas 1973. pp 91-96.
 13. Özgen T, Erbeni A, Bertan V, Sağlam S, Gürçay Ö, Pinal T. The use of computerized tomography in the diagnosis of cerebral hydatid cyst. J Neurosurg 1979; 50: 339-42.
 14. Sayak I, Çakmakçı M. The effect of prophylactic mebendazole in experimental peritoneal hydatidosis. Surg Gynecol Obstet 1986; 163:351.
 15. Todorow T, Vutova, Petkov D, Balkanski G. Albendazole treatment of multiple cerebral hydatid cyst: Case report. Trans R Soc Trop Med Hyg 1988; 12: 228-9.

Yazışma Adresi:

Yrd. Doç. Dr. Yusuf TÜZÜN
Atatürk Üniversitesi Tıp Fakültesi Nöroşirurji
Anabilim Dalı 25240-ERZURUM