

CASE REPORT

PARAPHARYNGEAL HYDATID CYST: REPORT OF A CASE

Mehdi Khajavi MD, Mohammad-Ebrahim Yarmohammadi MD*

Department of Otolaryngology and Head and Neck Surgery, Shahed University of Medical Sciences, Tehran, Iran

An 11-year-old male patient was referred to us with a right upper neck mass of 4 months' duration. Ultrasonography, computed tomography (CT) scan and magnetic resonance imaging (MRI) showed a cystic lesion in the right parapharyngeal space. Aspiration of the cyst did not show any evidence of hydatid cyst or protoscolex. Serum immunoelectrophoresis was also negative for hydatid cyst. When surgery was performed, the histopathologic report was consistent with a hydatid cyst and serum immunoelectrophoresis for hydatid cyst became positive.

Keywords • cyst • hydatid • parapharyngeal

Introduction

Hydatid cyst is endemic to Asia. Although it occurs frequently in the liver and lung, it can also localize in all tissues.^{1,2} Hydatid cyst is rarely found in the cervix and we were unable to find any report of a case involving the parapharyngeal space.^{3, 4, 5} Here we present a case of parapharyngeal hydatid cyst in an 11-year-old male child.

Case Report

An 11-year-old male child residing in a village of Ardebil Province, north-west of Iran, was admitted to our center with a mass in the upper right region of the neck, a change in voice and a snoring habit which started 4 months earlier.

On physical examination his voice was muffled. The mass did not have any pulse and was tender. The right lateral pharyngeal wall and right tonsil were pushed towards the midline and the right pyriform sinus was obliterated.

Electron spin resonance (ESR) was 70 mm/1 hour, complement regulatory protein (CRP) was 3⁺

positive and paraphenylenediamine (PPD) was negative. Ultrasonography (Figure 1), CT-scan (Figure 2) and MRI (Figure 3) revealed a parapharyngeal space cyst with extension to the lower neck inferiorly and to the skull base superiorly.

CT-myelography did not show any communication between the cyst and cerebrospinal fluid (CSF).

Analysis of the cyst aspirate showed a clear liquid, few white blood cells (WBC) with a glucose level of 6 mg/dL. With the exception of a glucose level of 60 mg/dL, the results of the CSF analysis were similar to the cyst aspirate.

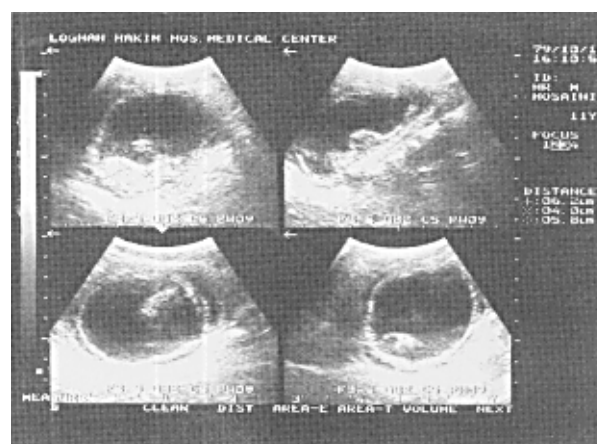


Figure 1. Ultrasonography showing a thick-walled cystic lesion.

*Correspondence: ME Yarmohammadi MD, Department of Otolaryngology and Head and Neck Surgery, Shaheed, Mostafa Khomani Hospital, Shahed University of Medical Sciences, Tehran, Iran. Fax: +98-21-8963122.

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Discussion

In 1999, Valverde et al reported two cases of cervical hydatid cyst without extension into the parapharyngeal space.³

The clear aspirate from the cyst suggested similarities to CSF, however the biochemical properties of the two aspirates differed; Lack of protoscolex in aspirated liquid does not rule out the diagnosis of hydatid cyst.³

The sensitivity of serologic tests is low especially in the case of extrahepatic hydatid disease (80 % in liver hydatid disease vs < 50 % in extrahepatic cases).²

Hypotention and fever were the results of the entry of some preexisting antigens into the blood.³ We recommend that the diagnosis of hydatid cyst be included in the differential diagnosis of parapharyngeal space cysts.

References

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Figure 2. Computed tomography-myelography showing no communication between the cyst and cerebrospinal fluid.

Protoscolex was not found in the cyst aspirate and serum immunoelectrophoresis for hydatid cyst was negative. Following cyst aspiration, the patient suffered a headache but did not show any signs of meningitis.

A unilocular cyst was discovered at surgery. The cyst wall and its contents were sent for pathologic examination and the result was consistent with a hydatid cyst. Serum immunoelectrophoresis for hydatid cyst turned positive later. Magnetic resonance imaging showed hypointense and hyperintense images on T1 and T2-weighted images and no enhancement after gadolinium injection.



Figure 3. T2-weighted magnetic resonance image showing a cyst with a three-layer wall (left). T1-weighted magnetic resonance image showing a thick-walled cyst (right).