Multiple Primary Intraspinal Extradural Hydatid Cyst in a Young Patient

ABSTRACT

Aim: Spinal hydatid disease is a rare entity, and a primary extradural, extraosseous hydatid lesion in spine is rarer, with only a few reported cases in literature. Our aim was to present one such case.

Background: Spinal hydatid disease being a very rare entity, high suspicion should be kept in compressive cystic spinal lesion, especially in endemic countries. Surgery is the treatment of choice with long-term antihelminthic therapy.

Case report: Herein we report a case of a 26-year-old male patient who presented to us with low back pain, progressive paraparesis for last 4 months with urinary retention. Magnetic resonance imaging (MRI) showed multiple intraspinal extradural cystic lesions at L1–2, L3–4 and L5–S1 level. Patient underwent laminectomy and complete excision of the cyst. He is under our regular follow-up for last 1 year without any recurrence.

Conclusion: A high level of suspicion is required for proper identification of a rare hydatid lesion in spine in extradural and extraosseous location and surgery is the treatment of choice.

Clinical significance: Hydatid cyst is to be kept as a differential diagnosis in any cystic spinal lesion, especially in an endemic area.

Keywords: Cyst, Echinococcus granulosus, Hydatid, Spine.


Source of support: Nil

Conflict of interest: None

BACKGROUND

Hydatid disease is caused by the larval stage of Echinococcus granulosus, which can involve a number of organs.
Gradually, patient made recovery and is being in follow-up for last 1 year without any recurrence. Patient was given albendazole (10 mg/kg) for 6 months.

DISCUSSION

It has been suggested that the involvement of the spine in case of hydatid cyst is through portovenous anastomoses or direct extension from pulmonary focus. Braithwaite and Lees have classified spinal hydatidosis into five subtypes: Primary intramedullary hydatid cyst; intradural extramedullary hydatid cyst; extradural intraspinal hydatid cyst; hydatid disease of the vertebrae; and paraspinal hydatid disease. Primary extradural spinal hydatid cysts are extremely rare. The MRI is the preferred radiological modality; on T1-weighted imaging, cyst is isointense to hypointense with only minimal enhancement. In contrast, on T2-weighted imaging, the cyst is hyperintense with well-defined hypointense wall. Serological investigation has limited value. Surgical management of spinal hydatid disease is difficult as excision of cyst without spilling is difficult because of microvesicular infiltration of the bone. Complete excision is possible if there is no osseous involvement, such as in our case in which there was primary extradural involvement with no bony extension.

There are only few cases of primary spinal extradural hydatid cysts reported in the literature. A total number of only 13 cases were reported by Karakasli et al. We suggest high suspicion of hydatid disease in patients with compressive cystic lesions of spine, especially in endemic areas. Complete excision without spillage is the management of choice in spinal hydatidoses. Long-term follow-up for at least 3 years is warranted and early surgical management in case of secondary hydatidoses or recurrence is recommended.

CONCLUSION

A high level of suspicion is required for proper identification of a rare hydatid lesion in spine in extradural and extravosaceous location and surgery is the treatment of choice.

CLINICAL SIGNIFICANCE

Hydatid cyst is to be kept as a differential diagnosis in any cystic spinal lesion, especially in an endemic area.

REFERENCES